QUESTION BANK

B.Com(H)

SEMESTER II
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QUESTION BANK

BUSINESS MATHEMATICS

B.COM - 102
UNIT I

I MULTIPLE CHOICE QUESTIONS:

1. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?
   A. 564
   B. 645
   C. 735
   D. 756
   E. None of these
   ANSWER: D

2. In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together?
   A. 360
   B. 480
   C. 720
   D. 5040
   E. None of these
   ANSWER: C

3. In how many different ways can the letters of the word 'CORPORATION' be arranged so that the vowels always come together?
   A. 810
   B. 1440
   C. 2880
   D. 50400
   E. 5760
   ANSWER: D

4. Out of 7 consonants and 4 vowels, how many words of 3 consonants and 2 vowels can be formed?
   A. 210
   B. 1050
   C. 25200
   D. 21400
   E. None of these
   ANSWER: C

5. In how many ways can the letters of the word 'LEADER' be arranged?
   A. 72
   B. 144
   C. 360
   D. 720
   E. None of these
   ANSWER: C
6. In a group of 6 boys and 4 girls, four children are to be selected. In how many different ways can they be selected such that at least one boy should be there?
   A. 159
   B. 194
   C. 205
   D. 209
   E. None of these
   ANSWER: D

7. How many 3-digit numbers can be formed from the digits 2, 3, 5, 6, 7 and 9, which are divisible by 5 and none of the digits is repeated?
   A. 5
   B. 10
   C. 15
   D. 20
   ANSWER: D

8. In how many ways a committee, consisting of 5 men and 6 women can be formed from 8 men and 10 women?
   A. 266
   B. 5040
   C. 11760
   D. 86400
   E. None of these
   ANSWER: C

9. A box contains 2 white balls, 3 black balls and 4 red balls. In how many ways can 3 balls be drawn from the box, if at least one black ball is to be included in the draw?
   A. 32
   B. 48
   C. 64
   D. 96
   E. None of these
   ANSWER: C

10. In how many different ways can the letters of the word 'DETAIL' be arranged in such a way that the vowels occupy only the odd positions?
    A. 32
    B. 48
    C. 36
    D. 60
    E. 120
    ANSWER: C
11. In how many ways can a group of 5 men and 2 women be made out of a total of 7 men and 3 women?
   A. 63
   B. 90
   C. 126
   D. 45
   E. 135
   ANSWER: A

12. How many 4-letters words with or without meaning, can be formed out of the letters of the word, 'LOGARITHMS', if repetition of letters is not allowed?
   A. 40
   B. 400
   C. 5040
   D. 2520
   ANSWER: C

13. In how many different ways can the letters of the word 'OPTICAL' be arranged so that the vowels always come together?
   A. 120
   B. 720
   C. 4320
   D. 2160
   E. None of these
   ANSWER: B

14. Common difference of sequence 5,8,11,14,… is
   A. 3
   B. −3
   C. 0
   D. 1
   ANSWER: A

15. Second term of sequence with general term $n^2 - 4/2$ is
   A. 3
   B. −3
   C. 1
   D. 0
   ANSWER: D

16. A.P whose nth term is 2n-1 is
   A. 1,3,6,…
   B. 2,3,5,…
   C. 1,3,5,…
   D. 5,3,1,…
17. 3 friends are met, they shook hands with each other, how many handshakes took place?
   A. 2
   B. 3
   C. 5
   D. 6
   ANSWER: B

18. Ahmed has homework to do in math, chemistry, and English. How many ways can he choose the order in which to do his homework?
   A. 3
   B. 4
   C. 6
   D. 1
   ANSWER: C

19. How many arrangements are possible for four students in a line?
   A. 8
   B. 12
   C. 24
   D. 4
   ANSWER: C

20. A coin is tossed four times. How many possible sequences of heads or tails?
   A. 8
   B. 32
   C. 16
   D. 12
   ANSWER: C

21. Common difference of sequence 2,8,12,16,… is
   A. 4
   B. −3
   C. 0
   D. 1
   ANSWER: A

22. 2,4,6,8,10,12,… is
   A. G.P
   B. A.P
   C. Geometric series
   D. arithmetic series
   ANSWER: B
23. Second term of sequence with general term $n^2 - 4/2$ is
   A. 3
   B. $-3$
   C. 1
   D. 0
   ANSWER: D

24. 1, 8, 15, 22, 29, 36,… is
   A. G.P
   B. A.P
   C. Geometric series
   D. arithmetic series
   ANSWER: B

25. A.P whose nth term is $2n-1$ is
   A. 1, 3, 6,…
   B. 2, 3, 5,…
   C. 1, 3, 5,…
   D. 5, 3, 1
   ANSWER: C

26. If $n > 1$ is a positive integer, then the largest integer $m$ such that $(nm + 1)$ divides $(1 + n + n^2 + … + n^{127})$
   A. 1, 3, 6,…
   B. 2, 3, 5,…
   C. 1, 3, 5,…
   D. 5, 3, 1
   ANSWER: C

27. The product of $n$ positive numbers is unity. Then the sum is
   A. a positive integer
   B. divisible by $n$
   C. equal to $n + n/1$
   D. never less than $n$
   ANSWER: D

28. $G_1, G_2,…, G^n$ are said to be $n$ geometric means between $a$ and $b$ if $a, G_1,…, G^n, b$ is
   A. a sequence
   B. not a sequence
   C. G.P
   D. A.P
   ANSWER: C
29. If A, G, H are arithmetic, geometric and harmonic means between a and b respectively, then A,G,H are
   A. in G.P
   B. in A.P
   C. in H.P
   D. Real number
   ANSWER: A

30. Common difference of sequence 5,8,11,14,… is
   A. 3
   B. −3
   C. 0
   D. 1
   ANSWER: A

31. If the letters of the word SACHIN are arranged in all possible ways and these words are written out as in dictionary, then the word ‘SACHIN’ appears at serial number
   A. 601
   B. 600
   C. 603
   D. 602
   ANSWER: A

32. 6 men and 4 women are to be seated in a row so that no two women sit together. The number of ways they can be seated is
   A. 604800
   B. 17280
   C. 120960
   D. 518400
   ANSWER: A

33. If repetition of the digits is allowed, then the number of even natural numbers having three digits is
   A. 250
   B. 350
   C. 450
   D. 550
   ANSWER: C

34. The number of ways of putting 10 different things in 2 boxes such that there are not less than 2 things in any of the two boxes is
   A. 1024
   B. 1023
   C. 1013
   D. 1002
   ANSWER: D
35. A five digit number divisible by 3 is to be formed using the numerals 0, 1, 2, 3, 4 and 5 without repetition. The total number of ways in which this can be done is
   A. 216
   B. 600
   C. 240
   D. 3125
   ANSWER: C

36. The number of arrangements of the letters of the word BANANA in which the two N’s do not appear adjacently is
   A. 40
   B. 60
   C. 80
   D. 100
   ANSWER: A

37. How many terms are there in the GP 5, 20, 80, 320........... 20480?
   A. 5
   B. 6
   C. 8
   D. 7
   ANSWER: D

38. The sum of the first 16 terms of an AP whose first term and third term are 5 and 15 is
   A. 600
   B. (b)765
   C. 640
   D. 680
   ANSWER: D

39. If the sum of the first 2n terms of the A. P. 2, 5, 8, ......, is equal to the sum of the first n terms of the A. P. 57, 59, 61, ......, then n equals
   A. 10
   B. 12
   C. 11
   D. 13
   ANSWER: C

40. If the first term minus third term of a G. P. = 768 and the third term minus seventh term of the same G. P. = 240, then the product of first 21 terms
   A. 1
   B. 2
   C. 3
   D. 4
   ANSWER: A
41. How many even three-digit numbers can be formed from the digits 1, 2, 5, 6, 9 without repeating any of the digits?
   A. 120
   B. 48
   C. 40
   D. 24
   ANSWER: D

42. If ten friends shake hands mutually, then the total number of handshakes is
   A. 45
   B. 50
   C. 90
   D. 100
   ANSWER: A

43. The total number of integers between 200 and 400, each of which either begins with 3 or ends with 3 or both, is
   A. 10
   B. 100
   C. 110
   D. 120
   ANSWER: C

44. Common difference of sequence 5, 15, 25, 35,… is
   A. 3
   B. −13
   C. 10
   D. 1
   ANSWER: C

45. In how many ways can a committee schedule three speakers for three different meetings if they are all available on any of the five possible dates?
   A. 10
   B. 36
   C. 60
   D. 120
   ANSWER: C

46. In how many ways the letters of the word ‘cotton’ can be arranged so that two t’s are not together?
   A. 60
   B. 120
   C. 100
   D. 36
   ANSWER: B
47. In how many ways a committee of 5 can be selected out of 8 persons?
   A. 56
   B. 12
   C. 10
   D. 50
   ANSWER: A

48. In a GP, the first term is 7, the last term is 448 and their sum is 889. Find the common ratio?
   A. 5
   B. 1
   C. 10
   D. 2
   ANSWER: D

49. The arithmetic mean of two numbers is 25 and their geometric mean is 24. Find the numbers.
   A. 16 and 20
   B. 18 and 32
   C. 10 and 20
   D. 42 and 58
   ANSWER: B

50. In how many ways the letters of the word FAILURE can be arranged if the four vowels are to remain together always?
   A. 20
   B. 24
   C. 576
   D. 668
   ANSWER: C

II SHORT ANSWER TYPE QUESTIONS:

1. In a college election, there are 4 candidates for President, 3 candidates for Vice-President and 2 candidates for secretary. In how many ways can these three offices be filled?

2. How many three letter words can be formed using letters of the words (i) SAMPLE and (ii) SANCHIT

3. For what value of n is \(^n\text{P}_5 = 20 * ^n\text{P}_3\)?

4. Show that \((n+3)! / n! = n^3 + 6n^2 – 11n + 6\)

5. If six times the number of Permutations of n objects taken 3 at a time is equal to seven times the number of permutation of (n-1) objects taken 3 at a time, find the value of n.

6. Prove that 0! = 1.

7. How many permutations can be made out of the letters of the words (i) MATHEMATICS (ii) COMMERCE (iii) EXAMINATION (iv) EVALUATION
8. In how many of the permutations of 10 different things taken 4 at a time will one particular (a) never occur (b) always occur 
9. How many 5 digits numbers can be formed with the digits 2,3,5,9, which are (i) greater than 30000 (ii) less than 70000 and (iii) lies between 30000 and 90000 
10. Let there be 3 red, 2 yellow and 2 green signal flags. How many different signals are possible if we wish to make signals by arranging all of the vertically on a flag. 
11. In how many different ways can examination paper be arranged in a row so that the best and the worst paper may never come together? 
12. There are 8 vacant chairs in a room. In how many ways can 5 persons take their seats? 
13. How many words can be formed from the letters of the word DAUGHTER so that vowels always occur together? 
14. How many even numbers can be formed by using all the digits 2, 3, 4, 5 and 6, no digit being repeated in any number? 
15. If (n+1)! = 0 * (n-1)!. Find n. 
16. Prove that n! + 1 is not divisible by any number between 2 and n. [Hint n! = n(n-1)(n-2)...3.2.1. is divisible by all nos. between 2 and n. Adding 1 to make it indivisible by any numbers between 2 and n.] 
17. Prove that \( ^nP_n = 2^n \). 
18. If \( ^nP_{r+6} = ^nP_{r+3} = 30800 \): 1. Find r. 
19. Find \( ^8P_4 \) and \( ^6P_6 \). 
20. In how many ways 8 beads can be arranged to form a necklace. 
21. In how many ways persons are seated at round table so that all shall not have the same neighbors in any two arrangements? 
22. A family of 4 brothers and 3 sisters is to be arranged for photograph in one row. In how many ways, can they be seated if (i) all sisters sit together (ii) no two sister’s sit together? 
23. If different permutations of the word examination are listed as in dictionary, what is the 50th word? 
24. 5 boys and 5 girls form a line with the boys and girls alternating. Find the number of ways of making the line. In how many different ways could they form a circle such that the boys and girls are alternate. 
25. The letters of the word AGAIN are written in all possible orders. If these words are written out as in dictionary, what is the 50th word? 
26. The third term of a geometric progression is 4. Find out product of the first five terms. 
27. Arithmetic mean between 2+\( \sqrt{2} \) and 2-\( \sqrt{2} \) is 
28. \( 2^1 + 2^2 +2^3 +\ldots+2^n = \) 
29. What is the 31st term of the sequence: 1, 4, 7, 10, .... 
30. What is the 11th term of the sequence: \( m-2n,m-n,m,\ldots \)? 
31. The common difference of an A. P. is 3 and the 15th term is 37. Find the first term. 
32. Three numbers are in A. P. The difference between the first and the last is 8 and the product of these two is 20. Find the numbers. 
33. Is \( -292 \) a term of the A. P. 7, 4, 1, \(-2,\ldots\)? 
34. The 35th term of an A. P. is 69. Find the sum of its 69 terms. 
35. The first term of an A. P. is 10, the last term is 50. If the sum of all the terms is 480, find the common difference and the number of terms.
36. The number of ways to seat 3 boys and 2 girls in a row if each boy must sit next to at least one girl is
37. Suppose there are ten balls in an urn, four blue, four red, and two green. The balls are also numbered 1 to 10. How many ways are there to select an ordered sample of four balls without replacement such that there are two blue balls and two red balls in the sample?
38. How many different rearrangements are there of the letters in the word BUBBLE?
39. How many three letter words are formed using the letters of the word TIME?
40. Using all the letters of the word "NOKIA", how many words can be formed, which begin with N and end with A?

III LONG ANSWER TYPE QUESTIONS:

1. Show that \( ^nC_r = \frac{(n-r+1)/r} * ^nC_{r-1} \)
2. The question paper on Mathematics and Statistics contain 10 questions divided into two groups of 5 questions each. In how many ways can an examinee select questions taking at least two questions from each group?
3. Find the number of combinations that can be made by taking 4 letters of the word COMBINATION.
4. In how many ways it is possible to make a selection by taking any number of 15 fruits, namely 7 mangoes, 5 apples and 3 oranges?
5. Find the number of ways in which a pack of 52 playing cards can be divided into 4 sets, three of them having 17 cards each and fourth just 1 card.
6. Which term of AP 2, 5, 8, … is 56?
7. If 7 times the 7th term of an AP is equal to the 11 times the 11th term, show that the 18th term of the AP is 0.
8. Prove that in an AP the sum of terms equidistant from the beginning and the end is equal to the sum of its first and last term.
9. If a, b, c are in AP. Prove that the following are also in AP.
   (i) \( \frac{1}{bc}, \frac{1}{ca}, \frac{1}{ab} \)
   (ii) \( a^2(b+c), b^2(c+a), c^2(a+b) \)
10. Find four numbers in AP, whose sum is 20 and sum of their squares, is 120.
11. Divide 20 into 4 parts which are in AP such that the product of the first and fourth is to the product of second and third in the ration 2:3.
12. Show that the sum of all odd numbers between 2 and 1000 which are divisible by 3 is 83667 and those not divisible by 3 are 166332.
13. Find the nth term of the series whose sum to n terms is 3 \( n^2 + 4n \). Show that the series is in AP.
14. A person saved Rs 16500 in 10 years. In each year after the first, he saved Rs. 100 more than he did in the preceding year. How much did he save in the first year?
15. How many terms of GP 1, 4, 1,… must be taken to make the sum equal to 341.
16. A ball is dropped from a height of 10 ft, rebounds to half its height on each bounce. Find the total vertical distance travelled when it hits the ground for the 5th time.
17. Insert geometric means between 16 and 256.
18. If G be the geometric mean between two given numbers and A1, A2 be the two arithmetic means between them, prove that \( G^2 = (2A1 – A2)(2A2 – A1) \).
19. The sum of four numbers in GP is 0 and the arithmetic mean of the first and the last number is 18. Find the number.
20. The sum of 3 numbers in GP is 35 and their product is 1000. Find the numbers.
21. Show that the product of n GMs between two quantities a and b is \((\sqrt[a]{ab})^n\).
22. From gentlemen and 4 ladies, a committee of 5 is to be formed. In how many ways can this be done if (i) the committee is to include at least one lady (ii) there is no restriction about its formation
23. Of ten electricity bulbs, three are defective but its not known which are defective. In how many ways three bulbs can be selected? How many of these selections will include at least one defective bulb?
24. Out of 4 officers and 8 jawans, a committee of is to be formed. In how many ways can this be done so as (i) to include exactly one officer (ii) to include at least one officer?
25. Find the number of ways in which a cricket team consisting of 11 players can be selected from 12 players. Also, find how many of these ways (i) include the captain (ii) do not include the captain.
26. Use mathematical induction to prove that 
\[1 + 2 + 3 + ... + n = \frac{n(n + 1)}{2}\]
for all positive integers n.
27. Prove that 
\[1^2 + 2^2 + 3^2 + ... + n^2 = \frac{n(n + 1)(2n + 1)}{6}\]
for all positive integers n.
28. Use mathematical induction to prove that 
\[1^3 + 2^3 + 3^3 + ... + n^3 = \frac{n^2(n + 1)^2}{4}\]
for all positive integers n.
29. Prove that for any positive integer number n, \(n^3 + 2n\) is divisible by 3.
30. Prove that \(3^n > n^2\) for \(n = 1, n = 2\) and use the mathematical induction to prove that \(3^n > n^2\) for a positive integer greater than 2.
31. The 'n', A. M's between 20 and 80 are such that the ratio of the first mean and the last mean is 1 : 3. Find the value of n.
32. If x, y, z are in A. P., show that 
\[(x + 2y - z) (2y + z - x) (z + x - y) = 4xyz\]
33. The 4th and the 9th term of a G. P. are 8 and 256 respectively. Find the G. P.
34. If a, b, c, and d are in G. P., then show that \((a + b) 2\), \((b + c) 2\), and \((c + d) 2\) are also in G. P.
35. Find the sum of the G. P.: 0.6, 0.06, 0.006, 0.0006, \(\Lambda\) to n terms.
36. Prove that \(2^n > n\) for all natural numbers n.
37. Prove that \((1+x)^n = 1 + nx\) for all natural numbers n, where \(x > -1\).
38. Find the sum of all natural numbers between 100 and 1000, which are exactly divisible by 11.
39. Out of 7 consonants and 4 vowels, how many words can be formed each containing 3 consonants and 2 vowels?
40. The ratio between the sums of n terms of two arithmetic progressions is \((7n + 1) : (4n + 27)\). Find the ratio of their 11th terms.
UNIT II

I MULTIPLE CHOICE QUESTIONS:

1. In transpose of matrix A, columns of matrix A becomes
   A. multiple column
   B. rows
   C. multiples
   D. divisors
   ANSWER: B

2. Dimension of matrix which consists of m rows and n columns is written as
   A. mxn
   B. n/m
   C. m-n
   D. m+n
   ANSWER: A

3. If A is a symmetric matrix, then transpose of A is:
   A. A
   B. |A|
   C. 0
   D. Diagonal matrix
   ANSWER: A

4. Unit matrix written in format of square matrix is also called as
   A. identity matrix
   B. unidentified matrix
   C. direction matrix
   D. dimension matrix
   ANSWER: A

5. Transpose of a column matrix is:
   A. Zero matrix
   B. Diagonal matrix
   C. Column matrix
   D. Row matrix
   ANSWER: D

6. According to determinant properties, multiple of one row is added to another row then determinant
   A. changed
   B. unchanged
   C. multiplied
   D. added
   ANSWER: B
7. Matrix which does not have an inverse by solving it, is classified as
   A. unidentified matrix
   B. linear matrix
   C. non-singular matrix
   D. singular matrix
   ANSWER: D

8. If the order of matrix A is m x p. And the order of B is p x n. Then the order of matrix AB is?
   A. m x n
   B. n x m
   C. n x p
   D. m x p
   ANSWER: A

9. In computation of determinant of a matrix, significant efficiencies are introduced by combining row to another which
   A. contains subtraction
   B. contains zero
   C. contains ones
   D. contains addition
   ANSWER: B

10. A matrix which has all its entries as zero is a?
    A. Null matrix
    B. Scalar matrix
    C. Diagonal matrix
    D. Identity matrix
    ANSWER: A

11. Transpose of a rectangular matrix is a?
    A. Rectangular matrix
    B. Diagonal matrix
    C. Square matrix
    D. Scalar matrix
    ANSWER: A

12. What is a, if
    \[ B = \begin{bmatrix} 1 & 4 \\ 2 & a \end{bmatrix} \] is a singular matrix?
    A. 5
    B. 6
    C. 7
    D. 8
    ANSWER: D
13. The transpose of a square matrix is:
   A. Null matrix
   B. Row matrix
   C. Square matrix
   D. Column matrix
   ANSWER: C

14. When you multiply a matrix by the identity matrix, you obtain the
   A. Inverse matrix
   B. Transpose matrix
   C. Adjoint matrix
   D. Original matrix
   ANSWER: D

15. If
   \[ A = \begin{bmatrix} 2i & i \\ i & -i \end{bmatrix} \]
   then \(|A| = ?\)
   A. 2
   B. 3
   C. 4
   D. 5
   ANSWER: B

16. Two matrices A and B are multiplied to get AB if?
   A. Both are rectangular matrices
   B. Both have same order
   C. No. of columns is equal to no. of rows
   D. No. of rows is equal to no. of columns
   ANSWER: D

17. The matrix
   \[ A = \begin{bmatrix} 9 & 0 \\ 0 & 9 \end{bmatrix} \]
   is a?
   A. scalar matrix
   B. identity matrix
   C. even matrix
   D. odd matrix
   ANSWER: A
18. If
\[
\begin{bmatrix}
  a_{11} & a_{12} \\
  a_{21} & a_{22} \\
  a_{31} & a_{32}
\end{bmatrix}
A =
\begin{bmatrix}
  b_{11} & b_{12} & b_{13} \\
  b_{21} & b_{22} & b_{23} \\
  b_{31} & b_{32} & b_{33}
\end{bmatrix}
\]
then order of matrix A = ?
A.  2 x 2
B.  2 x 3
C.  3 x 2
D.  3 x 3
ANSWER: D

19. \((AB)^t = ?\)
A.  \(B^tA^t\)
B.  \(A^tB^t\)
C.  \(AB\)
D.  \(BA\)
ANSWER: A

20. If
\[
A =
\begin{bmatrix}
  5 & 3 & 2 \\
  0 & 4 & 1 \\
  0 & 0 & 3
\end{bmatrix}
\]
then \(|A| = ?\)
A.  30
B.  40
C.  50
D.  60
ANSWER: D

21. Transpose of a rectangular matrix is a
A.  rectangular matrix
B.  diagonal matrix
C.  square matrix
D.  scaler matrix
ANSWER: A

22. Transpose of a column matrix is
A.  zero matrix
B.  diagonal matrix
C.  column matrix
D.  row matrix
ANSWER: D
23. Two matrices A and B are multiplied to get AB if
   A. both are rectangular
   B. both have same order
   C. no of columns of A is equal to columns of B
   D. no of rows of A is equal to no of columns of B
   ANSWER: C

24. If |A| = 0, then A is
   A. zero matrix
   B. singular matrix
   C. non-singular matrix
   D. 0
   ANSWER: B

25. If A is a symmetric matrix, then A^t =
   A. A
   B. |A|
   C. 0
   D. diagonal matrix
   ANSWER: A

26. The value of the determinant \(|\begin{array}{cc} a & b \\ c & d \end{array}|\) is
   A. A
   B. |A|
   C. 0
   D. diagonal matrix
   ANSWER: A

27. Matrix which does not have an inverse by solving it, is classified as
   A. unidentified matrix
   B. linear matrix
   C. non-singular matrix
   D. singular matrix
   ANSWER: A

28. If the order of matrix A is m×p. And the order of B is p×n. Then the order of matrix AB is?
   A. m × n
   B. n × m
   C. n × p
   D. m × p
   ANSWER: A
29. What is a, if
\[ B = \begin{bmatrix} 1 & 4 \\ 2 & a \end{bmatrix} \]
is a singular matrix?
A. 5
B. 6
C. 7
D. 8
ANSWER: D

30. If A and B are matrices, then which from the following is true?
A. \( A + B \neq B + A \)
B. \((A^t)^t \neq A\)
C. \(AB \neq BA\)
D. all are true
ANSWER: C

31. Transpose of a rectangular matrix is a-
A. rectangular matrix
B. diagonal matrix
C. square matrix
D. scaler matrix
ANSWER: A

32. Two matrices A and B are multiplied to get AB if
A. both are rectangular
B. both have same order
C. no of columns of A is equal to columns of B
D. no of rows of A is equal to no of columns of B
ANSWER: C

33. If A is a symmetric matrix, then \( A^t = \)
A. A
B. |A|
C. 0
D. diagonal matrix
ANSWER: A

34. What is the size of the matrix A =
\[ \begin{bmatrix} 1 & 2 & 3 & 4 \\ 12 & 3 & 4 & 1 \\ 13 & 14 & 1 & 2 \end{bmatrix} \]
A. 2X3
B. 4X5
35. If the order of matrix A is m×p. And the order of B is p×n. Then the order of matrix AB is?
   A. n × p  
   B. m × n  
   C. n × p  
   D. n × m
   ANSWER: B

36. \[0 0 0\] is
   A. Null matrix  
   B. Scaler matrix  
   C. Identity matrix  
   D. Diagonal matrix
   ANSWER: A

37. Matrices obtained by changing rows and columns is called-
   A. Symmetric  
   B. Transpose  
   C. Rectangular matrix  
   D. None of the above
   ANSWER: B

38. If \(|A| \neq 0\), then A is
   A. Non-singular matrix  
   B. Singular matrix  
   C. Diagonal matrix  
   D. Zero matrix
   ANSWER: A

39. Two matrices A and B are multiplied to get AB if
   A. Both are rectangular  
   B. Both have same order  
   C. No of columns of A is equal to no of columns of B  
   D. No of rows of A is equal to no of columns of B
   ANSWER: C

40. If \(|A| = 0\), then A is
   A. 0  
   B. Zero matrix  
   C. Singular matrix
41 Transpose of a rectangular matrix is a
A. Rectangular matrix  
B. diagonal matrix  
C. square matrix  
D. scaler matrix  
ANSWER: A

42 Two matrices A and B are multiplied to get AB if
A. both are rectangular  
B. both have same order  
C. no of columns of A is equal to columns of B  
D. no of rows of A is equal to no of columns of B  
ANSWER: C

43 If |A| = 0, then A is
A. zero matrix  
B. singular matrix  
C. non-singular matrix  
D. 0  
ANSWER: B

44 If A is a symmetric matrix, then A\(^t\) =
A. A  
B. |A|  
C. 0  
D. diagonal matrix  
ANSWER : A

45 A square matrix all of whose elements except the main diagonal are zeros is called a :
A. Null Matrix  
B. Singular Matrix  
C. Diagonal Matrix  
D. Symmetric Matrix  
ANSWER: C

46 Which of the following property does not hold for matrix multiplication?
A. Associative  
B. Distributive  
C. Commutative  
D. Additive Inverse  
ANSWER: C
47 Matrix A when multiplied with Matrix C gives the Identity matrix I, what is C?
A. Identity matrix
B. Inverse of A
C. Square of A
D. Transpose of A
ANSWER: B

48 The correct determinant value for the determinant \[
\begin{vmatrix}
7 & 8 \\
5 & 2
\end{vmatrix}
\]
would be
A. 26
B. -26
C. 35
D. -40
ANSWER: B

II SHORT ANSWER TYPE QUESTIONS:

1. Give the solution to the system of equations:

\[
5x - 2y + 3z = 1
\]

2. Given the system of equations:

\[
3x + 4y - 2z = 7
7x + 2y - z = -5
\]

2 a) Calculate D
2 b) Calculate Dy using Cramer’s rule
2 c) What is the exact value of y in the solution to the system?

3. Find the product AB where A and B are matrices given by:

\[
A = \begin{bmatrix}
1 & 3 & 5 \\
2 & 4 & 6
\end{bmatrix}
\quad B = \begin{bmatrix}
3 & 6 \\
1 & 4 \\
5 & 2
\end{bmatrix}
\]

4. Find the inverse of

\[
A = \begin{bmatrix}
1 & 3 \\
2 & 7
\end{bmatrix}
\]

5. Use the Gauss Jordan elimination method to solve for x, y, and z.

\[
\begin{vmatrix}
16 & -10 & -12 & -11 \\
10 & -15 & 15 & 5 \\
-1 & 14 & -9 & 0 \\
3 & -3 & -16 & -5
\end{vmatrix}
\]

6. Use Cramer’s rule to solve this system:

\[
8x + 5y = 2
2x - 4y = -10
\]
7. \[ A = \begin{bmatrix} 1 & 2 & 3 \\ 0 & 1 & 4 \end{bmatrix} \quad B = \begin{bmatrix} -1 & 2 \\ 2 & 3 \\ 5 & 0 \end{bmatrix} \]
Evaluate \( C = AB \)

8. Prove \((AB)^{-1} = B^{-1}A^{-1}\)

9. Evaluate the determinant:

\[ \begin{vmatrix} 1 & 2 \\ 3 & 4 \end{vmatrix} \]

10. \[
\begin{bmatrix}
3 & 20 & -11 & 0 \\
-14 & 5 & -3 & 6 \\
15 & 2 & 9 & -18 \\
-19 & 4 & -15 & 10 \\
\end{bmatrix}
+ \begin{bmatrix}
16 & -10 & -12 & -11 \\
10 & -15 & 15 & 5 \\
-1 & 14 & -9 & 0 \\
3 & -3 & -16 & -5 \\
\end{bmatrix}
\]

11. Solve:
\[
\begin{bmatrix}
13 & -17 & -6 \\
-15 & -14 & 9 \\
12 & -2 & 16 \\
\end{bmatrix}
- \begin{bmatrix}
-18 & -15 & -9 \\
19 & -3 & -8 \\
6 & 3 & 11 \\
\end{bmatrix}
\]

14. Find the inverse of:
\[
\begin{bmatrix}
2 & -1 & 10 & 9 \\
-16 & -15 & -2 & 15 \\
\end{bmatrix}
\]

15. Solve:
\[
\begin{bmatrix}
4 & -9 \\
-10 & -1x \\
-20 & 20 \\
9 & 18 \\
\end{bmatrix}
+ \begin{bmatrix}
15 & 2 \\
10 & -20 \\
-9 & -16 \\
19 & 18 \\
\end{bmatrix}
\]
\[
- \begin{bmatrix}
11 & -7 \\
-11 & 12 \\
0 & -1 \\
1 & -8 \\
\end{bmatrix}
= \begin{bmatrix}
8 & 0 \\
11 & -34 \\
-29 & 5 \\
27 & 44 \\
\end{bmatrix}
\]

16. Calculate the determinant of:
Use the Cramer’s Rule method.
\[
\begin{bmatrix}
20 & 9 & 8 \\
3 & 12 & -6 \\
-19 & 4 & 11 \\
\end{bmatrix}
\]
17. Solve:
\[
\begin{bmatrix}
0 & 11 \\
5 & 8
\end{bmatrix}X = \begin{bmatrix}
99 & -33 \\
77 & -9
\end{bmatrix}
\]

18. Solve:
\[
\begin{bmatrix}
1 & 12 \\
-4 & -7
\end{bmatrix}X + \begin{bmatrix}
-10 & -4 \\
8 & -8
\end{bmatrix} = \begin{bmatrix}
-97 & 111 \\
69 & -58
\end{bmatrix}
\]

19. Use an inverse matrix to solve the linear system.
\[
\begin{align*}
3x - 6y &= 45 \\
9x - 5y &= -8
\end{align*}
\]

20. \[3x - 2y = -31\]
\[9x - 8y = -103\]

21. Use the inverse of the linear system to solve for x, y, and z.
\[
\begin{align*}
5x - 3y - 7z &= -50 \\
-1x + 4y - 6z &= -40 \\
8x - 9y + 2z &= -2
\end{align*}
\]
\[
A^{-1} = \begin{bmatrix}
-2/3 & 1 & 2/3 \\
-2/3 & 22/23 & 37/69 \\
-1/3 & 7/23 & 17/69
\end{bmatrix}
\]

22. Solve equations using Cramer's rule
\[
\begin{align*}
-1x - 7y &= -12 \\
-3x - 8y &= 3
\end{align*}
\]

23. Calculate the inverse of:
\[
\begin{bmatrix}
20 & 9 & 8 \\
3 & 12 & -6 \\
-19 & 4 & 11
\end{bmatrix}
\]

24. Use the Gauss Jordan elimination method to solve for x, y, and z.
\[
\begin{align*}
5x - 3y - 7z &= -50 \\
-1x + 4y - 6z &= -40 \\
8x - 9y + 2z &= -2
\end{align*}
\]

25. Solve equations using Cramer's rule
\[
\begin{align*}
5x + y &= 12 \\
3x - 5y &= 32
\end{align*}
\]
26. The sales figure for two car dealers during January showed that Dealer A sold 5 deluxe, 3 premium and 4 standard cars while Dealer B sold 7 deluxe, 2 premium and 3 standard cars. Total sales over 2 months period of January-February revealed that Dealer A sold 8 deluxe, 7 premium and 6 standard cars. In the same 2 month period, Dealer B sold 10 deluxe, 5 premium and 7 standard cars. Write a 2*3 matrices summarizing sales data for January and the 2 month period for each dealer.

27. Find the adjoint of matrix \( \begin{bmatrix} 0 & 1 & 2 \\ 3 & 1 & 1 \end{bmatrix} \)

28. Find \( A - B \) when \( A = \begin{bmatrix} -9 & 0 \\ 8 & 2 \end{bmatrix} \) and \( B = \begin{bmatrix} 7 & 4 \\ 3 & 5 \end{bmatrix} \)

29. Find \( 2A + 3B \) when \( A = \begin{bmatrix} 5 & 3 \\ 6 & 1 \end{bmatrix} \) and \( B = \begin{bmatrix} 1 & 9 \\ 6 & 7 \end{bmatrix} \)

30. Solve using Cramer’s rule:
\[ x - 3y - 8z = -10 \]
\[ 3x + y - 4z = 0 \]
\[ 2x + 5y + 6z = 13 \]

31. Find the cofactor of \( a_{12} \) in the following:
\[
\begin{vmatrix}
2 & -3 & 5 \\
6 & 0 & 4 \\
1 & 5 & -7
\end{vmatrix}
\]

32. Using properties of determinants, prove the following:
\[
\begin{vmatrix}
1 + a^2 - b^2 & 2ab & -2b \\
2ab & 1 - a^2 + b^2 & 2a \\
2b & -2a & 1 - a^2 - b^2
\end{vmatrix} = (1 + a^2 + b^2)^3.
\]

33. Using properties of determinants, prove the following:
\[
\begin{vmatrix}
a + b + 2c & a & b \\
2c & b + c + 2a & b \\
c & a & c + a + 2b
\end{vmatrix} = 2(a + b + c)^3
\]
34. Using matrices, solve the following system of equations:
   \[ \begin{align*}
   x + 2y - 3z &= -4 \\
   2x + 3y + 2z &= 2 \\
   3x - 3y - 4z &= 11
   \end{align*} \]

35. If \( a, b, c \) are positive and unequal, show that the following determinant is negative:
   \[ \Delta = \begin{vmatrix} a & b & c \\
   b & c & a \\
   c & a & b \end{vmatrix} \]

36. Solve the following system of equations by Cramer’s rule:
   \[ \begin{align*}
   x - 4y - z &= 11 \\
   2x - 5y + 2z &= 39 \\
   -3x + 2y + z &= 1
   \end{align*} \]

37. Solve the following system of linear equations using elementary row operations:
   \[ \begin{align*}
   2x + 3y - z &= 9 \\
   x + y + z &= 9 \\
   -3x + 2y + z &= -1
   \end{align*} \]

38. Explain properties of the Inverse of a matrix.

39. Find the adjoint of the matrix \( A = \begin{bmatrix} 2 & 4 & 6 \\
   7 & 8 & 3 \\
   5 & 9 & 2 \end{bmatrix} \)

40. Solve:
   \[ \begin{bmatrix} 0 & 11 \\
   5 & 8 \end{bmatrix} \begin{bmatrix} x \\
   y \end{bmatrix} = \begin{bmatrix} 99 \\
   -33 \end{bmatrix} \]

III   LONG ANSWER TYPE QUESTIONS:

Q. Given \( A = \begin{bmatrix} 2 & -4 \\
   1 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 4 & -1 \\
   2 & 0 \end{bmatrix} \quad C = \begin{bmatrix} 4 \\
   3 \end{bmatrix} \quad D = [3 \quad 1] \quad E = \begin{bmatrix} -3 & 2 & 0 \\
   1 & -1 & -2 \end{bmatrix} \)

Calculate. If not possible, put undefined:
1) \( A + B \)
2) \( 3B \)
3) \( AC \)
4) \( \begin{bmatrix} 2 & -4 \\
   1 & 3 \end{bmatrix} \)
5) \( AE \)
6) \( AD \)
7) \( B + D \)
8) \( B - 2A \)
Perform the following row operations beginning with matrix A and using your answer to each problem as the matrix for the next.

9) $-2R_2 + R_1 \rightarrow R_1$
10) $R_1 \leftrightarrow R_2$
11) $\frac{1}{10} R_2$

12) Given the matrix $\begin{bmatrix} 1 & 6 & 5 \\ 2 & 3 & 1 \\ 0 & 2 & 4 \end{bmatrix}$ calculate the determinant.

13) Find the matrix X such that $\begin{bmatrix} 2 \\ -1 \\ 3 \\ 4 \end{bmatrix}$ multiplied with matrix $X = \begin{bmatrix} 1 & 4 \\ -5 & 9 \end{bmatrix}$

14. a. Solve the following system algebraically: $x - 2y + 3z = 4$

b. Use Gauss Jordan to solve the following system: $2x + y - 4z = 3$
$-3x + 4y - z = -2$

On Problems 15 and 16, use Cramer’s Rule (determinants) to solve.

15. $2x - 3y = -4$
$5x + 7y = 1$

16. $5x + 2y - z = -7$
$x - 2y + 2z = 0$
$3y + z = 17$

SOLVE using Gauss Jordan Method:

17. $-2x + 3y - z = -1$
$x - 2y + z = 3$

18. $-2x + 3y - z = 4$
$x - 2y + z = 0$
$2x - 3y + z = 1$

19. $x + y - z = 0$
$3x - y + 3z = -2$
$x + 2y - 3z = -1$

20. Three persons buy cold drinks of different brands A, B and C. The first person buys 12 bottles of A, 5 bottles of B, and 3 bottles of C. The second person buys 4 bottles of A, 6 bottles of B and 10 bottles of C. The third person buys 6 bottles of A, 7 bottles of B and 9 bottles of C. Represent this information in the form of a matrix. If each bottle of A costs Rs.4, each bottle of B costs Rs.5 and each of C costs Rs. 6, then using matrix operations, find the total sum of money spent individually by three persons.

21. There are three electric dealers in a pure competition market who sell Radios, Tape recorders and television sets. A sells weekly 48 radios, 20 tape recorders and 12 televisions; B sells weekly 57 radios, 17 tape recorders and 15 television sets and C sells weekly 35 radios, 22 tape recorders and 18 television sets. Using matrices, calculate their individual profits, if the net revenue on a radio is Rs 50, on a tape recorder Rs 75 and television set of Rs 250.

22. An amount of Rs5000 is put into three investments at the rates of interest of 6%, 7% and 8% per annum respectively. The total annual income is Rs358. If the combined income
from the first two investments is Rs70 more than the income from the third, find the amount of each investment by using matrix algebra.

23. Food I has 3 units of vitamin A, 9 units of vitamin B and 12 units of vitamin C. Food II has 6, 9 and 15 units respectively and Food III has 9, 0, 9 units respectively. 33 units of vitamin A, 27 units of B and 60 of C are required. Find the amount of three foods that will provide exactly these amounts. Use matrix method.

24. An amount of Rs10,000 is put into three investments at the rate of 10, 12 and 15 percent per annum. The combined income is Rs1,310 and the combined income of the first and second investment is Rs190 short of the income from the third. Find the investment in each using determinant method (Cramer’s rule).

25. An investor has 30,000 that he wants to invest in bank deposits, equity shares and unit trust. In view of the risk involved in buying the equity shares, he wants to invest an amount in equity shares equal to 20% of his total investment in bank deposits and unit trust. Because of certain tax exemptions available to him, he would like to maintain a 3:2 ratio between investments in bank deposits and unit trust. Determine the amount he would invest in each of three forms of investments, using matrix inversion method.

26. A company’s employees are working to create a new energy bar. They would like the two key ingredients to be peanut butter and oats, and they want to make sure they have enough carbohydrates and protein in the bar to supply the athlete. They want a total of 31 carbohydrates and 23 grams of protein to make the bar sufficient. Using the following table, create a system of two equations and two unknowns to find how many tablespoons of each ingredient the bar will need. Solve the system of equations using matrices. Show all work to receive full credit.

<table>
<thead>
<tr>
<th>Carbohydrates</th>
<th>Protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peanut Butter</td>
<td>2</td>
</tr>
<tr>
<td>Oats</td>
<td>5</td>
</tr>
</tbody>
</table>

27. The following matrix consists of a shoe store’s inventory of flip flops, clogs, and Mary Janes in sizes small, medium, and large:

<table>
<thead>
<tr>
<th></th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flip Flops</td>
<td>20</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>Clogs</td>
<td>15</td>
<td>42</td>
<td>24</td>
</tr>
<tr>
<td>Mary Janes</td>
<td>18</td>
<td>38</td>
<td>22</td>
</tr>
</tbody>
</table>

The store wants to know how much their inventory is worth for all the shoes. How should we set up the matrix multiplication to determine this the best way?

28. An outbreak of Chicken Pox hit the local public schools. Approximately 15% of the male and female juniors and 25% of the male and female seniors are currently healthy, 35% of the male and female juniors and 30% of the male and female seniors are currently
sick, and 50% of the male and female juniors and 45% of the male and female seniors are carriers of Chicken Pox.

There are 100 male juniors, 80 male seniors, 120 female juniors, and 100 female seniors.

Using two matrices and one matrix equation, find out how many males and how many females (don’t need to divide by class) are healthy, sick, and carriers.

29. A florist is making 5 identical bridesmaid bouquets for a wedding. She has $610 to spend (including tax) and wants 24 flowers for each bouquet. Roses cost $6 each, tulips cost $4 each, and lilies cost $3 each. She wants to have twice as many roses as the other 2 flowers combined in each bouquet. How many roses, tulips, and lilies are in each bouquet?

30. The following coefficient matrix, or input-output matrix, shows the values of energy and manufacturing consumed internally needed to produce $1 of energy and manufacturing, respectively. In other words, of the value of energy produced (x for energy, y for manufacturing), 40 percent of it, or .40x pays to produce internal energy, and 25 percent of it, or .25x pays for internal manufacturing. Of the value of the manufacturing produced, .25y pays for its internal energy and .10y pays for manufacturing consumed internally. The inputs are the amount used in production, and the outputs are the amounts produced.

\[
\begin{bmatrix}
.40 & .25 \\
.25 & .10
\end{bmatrix}
\]

(a) If the capacity of energy production is $15 million and the capacity of manufacturing production is $20 million, how much of each is consumed internally for capacity production?

(b) How much energy and manufacturing must be produced to have $8 million worth of energy and $5 million worth of manufacturing available for consumer use?

31. The sum of three numbers is 2. If we subtract the second number from twice the first number, we get 3. By adding double the second number and the third number we get 0. Represent it algebraically and find the numbers using matrix method.

32. A company produces three products every day. There total production on a certain day is 45 tons. It is found that the production of third product exceeds the productions of first product by 8 tons while the total production of first and third product is twice the production of second product. Determine the production level of each product using Cramer's rule.

33. Two farmers Ramkishan and Gurcharan Singh cultivates only three varieties of rice namely Basmati, Permal and Naura. The sale (in Rupees) of these varieties of rice by both the farmers in the month of September and October are given by the following matrices A and B.
September Sales (in Rupees)

\[ A = \begin{bmatrix}
10,000 & 20,000 & 30,000 \\
50,000 & 30,000 & 10,000 \\
\end{bmatrix} \]

Ramkishan

Gurcharan Singh

October Sales (in Rupees)

\[ B = \begin{bmatrix}
5000 & 10,000 & 6000 \\
20,000 & 10,000 & 10,000 \\
\end{bmatrix} \]

Ramkishan

Gurcharan Singh

(i) Find the combined sales in September and October for each farmer in each variety.
(ii) Find the decrease in sales from September to October.
(iii) If both farmers receive 2% profit on gross sales, compute the profit for each farmer and for each variety sold in October.

34. A trust fund has Rs 30,000 that must be invested in two different types of bonds. The first bond pays 5% interest per year, and the second bond pays 7% interest per year. Using matrix multiplication, determine how to divide Rs 30,000 among the two types of bonds. If the trust fund must obtain an annual total interest of: (a) Rs 1800 (b) Rs 2000

35. The bookshop of a particular school has 10 dozen chemistry books, 8 dozen physics books, 10 dozen economics books. Their selling prices are Rs 80, Rs 60 and Rs 40 each respectively. Find the total amount the bookshop will receive from selling all the books using matrix algebra.

36. Show that the matrix \( A = \)

\[
\begin{bmatrix}
1 & 3 & -1 \\
2 & 4 & 0 \\
1 & 1 & 5 \\
\end{bmatrix}
\]

is non-singular and hence find its inverse.

37. Given the matrix \( A = \)

\[
\begin{bmatrix}
0 & 1 & 2 \\
1 & 2 & 3 \\
3 & 1 & 1 \\
\end{bmatrix}
\]

a. Compute \( A^{-1} \)
b. Verify that \((A')^{-1} = (A^{-1})'\)
38. Solve the following system of linear equations using Gauss-Jordan elimination method:
\[ X+2y+3z = 1; \ x+3y+5z = 2; \ 2x+5y+9z = 3 \]

39. An amount of Rs. 5000 is put into three investments at the rates of interest of 6%, 7% and 8% per annum respectively. The total annual income is Rs. 358. If the combined income from the first two investments is Rs. 70 more than the income from the third, find the amount of each investment by using matrix algebra?

40. Solve the following system of equations with the help of matrices:
\[ 3x+y+2z = 3, \ 2x-3y-z = -3, \ x+2y+zz = 4 \]

UNIT III

I MULTIPLE CHOICE QUESTIONS:

In each of Questions 1-4, a function is given. Choose the alternative that is the derivative, \( dy/dx \), of the function:

1. \[ y = (4x+1)(1-x)^3 \]
   A. \( -12(1-x)^2 \)
   B. \( (1-x)^2(1+8x) \)
   C. \( (1-x^2)(1-16x) \)
   D. \( 3(1-x)^2(4x+1) \)
   ANSWER: C

2. \[ y = (2-x)/(3x+1) \]
   A. \( -7/(3x+1)^2 \)
   B. \( -9/(3x+1)^2 \)
   C. \( (6x-5)/(3x+1)^2 \)
   D. \( (7-6x)/(3x+1)^2 \)
   ANSWER: A

3. \[ y = 2/(5x+1)^3 \]
   A. \( -30/(5x+1)^2 \)
   B. \( -30(5x+1)-4 \)
   C. \( -6/(5x+1)^4 \)
   D. \( -10(5x+1)-4/3/3 \)
   ANSWER: B

4. \[ y = 3x^2/3 - 4x^{1/2} - 2 \]
   A. \( 2x^{1/3}-2x^{1/2} \)
   B. \( 3x^{-1/3}-2x^{1/2} \)
   C. \( 9x^5/3/5-8x^{3/2} \)
   D. \( 2x^{-1/3}-2x^{1/2} \)
   ANSWER: D
5. If $A = f + 2g$, then $A'(3) =$
   A. -2
   B. 2
   C. 7
   D. 8
   ANSWER: B

6. If $B = f \times g$, then $B'(2) =$
   A. -20
   B. -7
   C. -6
   D. -1
   ANSWER: B

7. If $H(x) = \sqrt{f(x)}$, then $H'(3) =$
   A. $\frac{1}{4}$
   B. $\frac{1}{2}\sqrt{10}$
   C. 2
   D. $\frac{2}{\sqrt{10}}$
   ANSWER: D

8. If $M(x) = f(g(x))$, then $M'(1) =$
   A. -12
   B. -6
   C. 4
   D. 12
   ANSWER: A

9. If $P(x)=f(x^3)$, then $P'(1) =$
   A. 2
   B. 6
   C. 8
   D. 12
   ANSWER: B

   In questions 10-13, find $y'$

10. $y = \sqrt{x^2+2x-1}$
    A. $(x+1)/y$
    B. $4y(x+1)$
    C. $\frac{1}{2} \sqrt{x^2+2x-1}$
    D. None of these
    ANSWER: A
11. \( \frac{d}{dx} \left( \frac{1}{x} \right) \) = ?
   A. \( x^2 \)
   B. \( -x^2 \)
   C. \( \frac{1}{x^2} \)
   D. \( -\frac{1}{x^2} \)
   ANSWER: D

12. \( \frac{d}{dx} \left( \frac{x^6}{x^8} \right) = ? \)
   A. \( \frac{x^2 + 2x^3}{x^6} \)
   B. \( -\frac{2}{x^3} \)
   C. \( 2x^3 \)
   D. \( -2x^3 \)
   ANSWER: B

13. If \( F = \frac{GmM}{r^2} \), then \( \frac{dF}{dr} = ? \)
   A. \( -\frac{2GmM}{r^3} \)
   B. \( \frac{2GmM}{r^3} \)
   C. 0
   D. 1
   ANSWER: A

14. If \( f(x) = x \cos x \), then \( f''(0) = ? \)
   A. \( -1 \)
   B. 0
   C. 1
   D. \( \infty \)
   ANSWER: C
15. \( y = \ln(\frac{e^x}{e^x-1}) \)
   A. \( x - (\frac{e^x}{e^x-1}) \)
   B. \( \frac{1}{e^x-1} \)
   C. \( -\frac{1}{e^x-1} \)
   D. 0
   ANSWER: C

16. \( y = \ln(\sec x + \tan x) \)
   A. \( \sec x \)
   B. \( \frac{1}{\sec x} \)
   C. \( \tan x + (\sec^2 x/\tan x) \)
   D. \( \frac{1}{\sec x + \tan x} \)
   ANSWER: A

17. \( y = e^x - e^{-x} \)
   A. 1
   B. \( \frac{2}{(e^x + e^{-x})^2} \)
   C. \( \frac{4}{(e^x + e^{-x})^2} \)
   D. 0
   In each question \( y \) is a differential function of \( x \). Choose the alternative that is the derivative \( \frac{dy}{dx} \).
   ANSWER: D

18. \( x + \cos(x+y) = 0 \)
   A. \( \cos(x+y)-1 \)
   B. \( \cos(x+y) \)
   C. \( x/\sin(x+y) \)
   D. \( \frac{1-\sin x}{\sin y} \)
   ANSWER: A

19. \( \sin x - \cos y - 2 = 0 \)
   A. \( -\cot x \)
   B. \( -\cot y \)
   C. \( \cos x/\sin y \)
   D. \(-\cos y \cos x \)
   ANSWER: D

20. \( 3x^2 - 2xy + 5y^2 = 1 \)
   A. \( \frac{(3x+y)}{(x-5y)} \)
   B. \( \frac{(y-3x)}{(5y-x)} \)
   C. \( 3x+5y \)
   D. None of these
   ANSWER: B
21. If \( f \) and \( g \) are continuous on \([a,b]\), then \( \int_a^b f(x) + g(x) \, dx = \)
A. \( \int_a^b f(x) \, dx + \int_a^b g(x) \, dx \)
B. \( \int_a^b f(x) \, dx - \int_a^b g(x) \, dx \)
C. \( \int_a^b f(x) \, dx \)
D. \( \int_a^b g(x) \, dx \)
ANSWER: A

22. If \( y' = y + 2t \), then \( 0 = y + 2t \) is
A. Equilibrium solution
B. Non equilibrium solution
C. Basic solution
D. Non Basic Solution
ANSWER: A

23. If \( f' \) is continuous on \([-1,4]\), then \( \int_{-1}^4 f'(w) \, dw = \)
A. \( f(4) - f(-1) \)
B. \( f(4) + f(-1) \)
C. \( f(4) \)
D. \( f(-1) \)
ANSWER: A

24. All continuous functions have
A. anti derivatives
B. derivatives
C. No derivatives
D. False derivatives
ANSWER: A

25. If \( \phi(x) = \int_0^\sqrt{x} t \, dt \), then \( \frac{d\phi}{dx} = \)
A. \( 2x^2 \)
B. \( \sqrt{x} \)
C. \( 0 \)
D. \( 1 \)
ANSWER: A

26. The function \( f(x) = x^3 - 6x^2 + 9x + 25 \) has
A. a maxima at \( x=1 \) and a minima at \( x=3 \)
B. a maxima at \( x=3 \) and a minima at \( x=1 \)
C. no maxima, but a minima at \( x=1 \)
D. a maxima at \( x=1 \), but no minima
ANSWER: A
27. The value of \( a = \int_{0}^{5} (2 - \sin x) \, dx \) is

A. \( >0 \)
B. \( 2 \)
C. \( 0 - 1 + 100 - 10 + 1 \)
D. undefined

ANSWER: A

28. The interval in which the Lagrange's theorem is applicable for the function \( f(x) = \frac{1}{x} \) is

A. \([-3, 3]\]
B. \([-2, 2]\]
C. \([2, 3]\]
D. \([-1, 1]\]

ANSWER: C

29. If \( f(x) = |x| \), then for interval \([-1, 1]\),\( f(x) \)

A. satisfied all the conditions of Rolle's Theorem
B. satisfied all the conditions of Mean Value Theorem
C. does not satisfied the -conditions of Mean Value Theorem
D. None of these

ANSWER: C

30. The minimum value of \( |x^2 - 5x + 21| \) is

A. -5
B. 0
C. -1
D. 2

ANSWER: B

31. \[
\frac{d}{dx} \left( \frac{x^6}{x^3} \right) = ?
\]

A. \( \frac{x^2 + 2x^3}{x^6} \)
B. \( -\frac{2}{x^3} \)
C. \( 2x^3 \)
D. \( -2x^3 \)

ANSWER: B
32. If \( y = \ln e^{x^2} \), then \( y' = ? \)

(A) \( \ln x \)
(B) \( \frac{1}{e^{x^2}} \)
(C) \( 2x \)
(D) \( \frac{1}{2x} \)

ANSWER: C

33. What is the second derivative of \(-x^3\)?

(A) \(-3x\)
(B) \(3x\)
(C) \(-6x\)
(D) \(6x\)

ANSWER: C

34. The definition of the first derivative of a function \( f(x) \) is

(A) \( f'(x) = \frac{f(x + \Delta x) + f(x)}{\Delta x} \)
(B) \( f'(x) = \frac{f(x + \Delta x) - f(x)}{\Delta x} \)
(C) \( f'(x) = \lim_{\Delta x \to 0} \frac{f(x + \Delta x) + f(x)}{\Delta x} \)
(D) \( f'(x) = \lim_{\Delta x \to 0} \frac{f(x + \Delta x) - f(x)}{\Delta x} \)

ANSWER: D

35. Given \( y = x^3 \ln x \), \( \frac{dy}{dx} \) is

(A) \(3x^2 \ln x\)
(B) \(3x^2 \ln x + x^2\)
(C) \(x^2\)
(D) \(3x\)

ANSWER: B
36. If \( x^2 + 2xy = y^2 \), then \( \frac{dy}{dx} \) is

- (A) \( \frac{x + y}{y - x} \)
- (B) \( 2x + 2y \)
- (C) \( \frac{x + 1}{y} \)
- (D) \( -x \)

ANSWER: A

37. Given \( y = 5e^{3x} + \sin x \), \( \frac{dy}{dx} \) is

- (A) \( 5e^{3x} + \cos x \)
- (B) \( 15e^{3x} + \cos x \)
- (C) \( 15e^{3x} - \cos x \)
- (D) \( 2.666e^{3x} - \cos x \)

ANSWER: B

38. Given \( y = \sin 2x \), \( \frac{dy}{dx} \) at \( x = 3 \) is most nearly

- (A) 0.9600
- (B) 0.9945
- (C) 1.920
- (D) 1.989

ANSWER: C

II SHORT ANSWER TYPE QUESTIONS:

1. If \( u = e^{xyz} \), show that
\[
\frac{\partial^3 u}{\partial x \partial y \partial z} = \left( 1 + 3xyz + x^2 y^2 z^2 e^{xyz} \right)
\]

2. If \( x = r \cos \theta \), \( y = r \sin \theta \)
Prove that
\[
\frac{\partial^2 r}{\partial x^2} \cdot \frac{\partial^2 r}{\partial y^2} = \left( \frac{\partial^2 r}{\partial x \partial y} \right)^2
\]

3. Verify Euler’s theorem for
\( u = ax^2 + 2hxy + by^2 \)
4. If \( u = \sin^{-1} \frac{1}{x^2 + y^6} \)

Evaluate \( x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} \)

5. If \( x = \rho \sin \theta, \ y = \rho \sin \theta, \ z = z \)

Show that \( \frac{\partial(u, y, z)}{\partial(x, y, z)} = \rho \)

6. If \( x = e^u \cos \phi, \ y = e^u \sin \phi, \) show that \( \frac{\partial(u, \phi)}{\partial(x, y)} = e^{-2u} \)

7. If \( u, \ v \) are functions of \( x \) and \( y \) then show that \( \frac{\partial(u, \phi)}{\partial(x, y)} \frac{\partial(x, y)}{\partial(u, \phi)} = 1 \)

8. Find the approximate value of \( \left[ (0.98)^2 + (2.01)^2 + (1.94)^2 \right]^{\frac{1}{2}} \)

9. Expand \( \cos x \) in powers of \( x \) and \( y \) as far as the terms of third degree.

10. Find the dimensions of rectangular box (without top) with a given volume so that the material used is minimum.

11. In any \( \triangle ABC \) find the maximum value of \( \cos A \cos B \cos C \) by Lagrange’s method.

12. Find the volume of greatest rectangular parallelepiped that can be inscribed inside the ellipsoid \( \frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1 \)

13. The temp \( T \) and any pt \( (x, y, z) \) in space is \( T = 400 xyz^2 \). Find highest temperature on surface of unit sphere \( x^2 + y^2 + z^2 = 1 \).

14. Evaluate \( \int \int_{x^2 + y^2 \leq 1} f(x, y) \, dx \, dy \) over the region bounded by the line \( y = x \) and the curve \( y = x^2 \).

15. Find by double integration the area lying inside the circle \( r = a \sin \theta \) and out side the cardioid \( r = a(1 - \cos \theta) \).

16. Change the order of integration \( \int_{-a}^{a} \int_{0}^{\sqrt{a^2 - x^2}} f(x, y) \, dx \, dy \)

17. Evaluate \( \int \int_{s} \sqrt{xy - y^2} \, dx \, dy \) where \( s \) is a \( \triangle \) with vertices \( (0,0), (10,1) \) and \( (1,1) \).

18. Evaluate \( \int_{0}^{1} \int_{0}^{\sqrt{1-x^2}} \int_{0}^{\sqrt{1-x^2-y^2}} xyz \, dz \, dy \, dx \)
19. Evaluate \( \iiint_R \frac{dx \, dy \, dz}{(x+y+z+1)^3} \) where \( R \) is bounded by the planes \( x = 0, \ y = 0, \ z = 0 \) and \( x+y+z=1 \).

20. Change the order of integration in the integral
\[
\int_0^a \int_0^\sqrt{a^2-x^2} x \, dx \, dy \quad \text{and then evaluate it.}
\]

21. Express as a single integral
\[
\int_0^a \int_0^{\sqrt{a^2-x^2}} x \, dy \, dx + \int_0^a \int_0^{\sqrt{a^2-x^2}} x \, dx \, dy \quad \text{and evaluate it.}
\]

22. If \( y = ax^3 + bx^2 + cx + d \), show that \( y_4 = 0 \).

23. If \( ax^2 + 2hxy + by^2 = 0 \), prove that \( y_2 = \frac{h^2 - ab}{hx+by} \).

24. If \( b^2x^2 + a^2y^2 = a^2b^2 \), prove that \( y^2 = -\frac{b^4}{a^2y^3} \).

25. If \( y(1-x) = x^2 \), prove that \( (1-x)y_2 - 2y_1 = 2 \).

26. Find \( f'(3) \) if \( f(x) = 4x^2 \).

27. Find \( f'(\frac{\pi}{4}) \) if \( f(x) = \sin(2x) \).

28. Find \( f'(3) \) if \( f(x) = 4x^2 \) by using the form \( f'(a) = \lim_{x \to a} \frac{f(x) - f(a)}{x - a} \) of the definition of a derivative.

29. Find the equation of the line tangent to the function \( f(x) = x^3 - 0.165x + 3.993 \times 10^{-4} \) at \( x = 0.05 \).

30. Find the derivative of \( f(x) = 6 \).

31. Given that \( y = 3\sqrt{5x+1} \), find \( dy/dx \).

32. Find the indicated limit:
\[
\lim_{x \to 1} \frac{x^2 + 2x + 5}{x^2 + 1}
\]

33. True or False. The derivative of \( [g(x)]^2 \) is equal to \( [g'(x)]^2 \).

34. Differentiate the expression (with respect to \( x \))-\( (-7x^2 - 5x)\cos x \).

35. Find the indicated limit:
\[
\lim_{x \to 0} \frac{\sin(a+x)-\sin(a-x)}{x}
\]

36. Compute the derivative of \( f(x) = x / x - 2 \) by using the quotient rule.

37. Find \( dy \, dx \) for the function defined implicitly by \( x \, 2 \, y + ay^2 = b \), where \( a \) and \( b \) are fixed constants.

38. Find the absolute maximum and minimum values of \( f(x) = x^3 - 12x - 5 \) on the interval \([-4, 6] \).
39. The manufacturing cost of an item consists of Rs. 400 as overheads, material cost as Rs.
3 per item and the labour cost $X^2/4$ for $x$ items produced. Find how many items be
produced to have the average cost as minimum.
40. Find local maximum and local minimum values of the function $f$ given by $f(x) = 3x^4 +
4x^3 - 12x^2 + 12$

III LONG ANSWER TYPE QUESTIONS:

1. Prove that $\mu = e^{-x}(x\sin y - y\cos y)$ is harmonic.
2. Evaluate $\int_{c} \bar{z}dz$ from $z=0$ to $z=4 + 2i$ along the curve $c: z = t^2 + i t$
3. For a monopolist’s product, the demand function is $p = 50 / \sqrt{x}$ and average
cost function is $AC = 0.50 + \frac{1000}{x}$. Find the profit maximizing price and output. At
this level, show marginal revenue is equal to marginal cost.
4. Show that the transformation $w = \frac{2z + 3}{z - 3}$ maps the circle $x^2 + y^2 - 4x = 0$ onto the straight
line $4u + 3 = 0$.
5. A chemical company acquires its requirements in 20 orders of the size 250 drums each.
Each drum costs Rs80. The replenishment cost is Rs40 irrespective of the order size and
the annual carrying cost is 2% of the average rupee inventory. Find how much can
company save if its buys according to economic order quantity using calculus.
6. Evaluate $\int_{0}^{\pi} \sin h 5z \, dz$
7. Evaluate $\int_{c} \frac{e^{2z}}{(z+1)^4} \, dz$, where $c : |z| = 3$
8. Evaluate $\int_{c} \frac{e^{iz}}{z^3} \, dz$, where $c : |z| = 1$
9. Find the region of convergence of $\sum_{n=1}^{\infty} n!2^n$
10. Expand $f(z) = \frac{1}{z - 3}$ in a LAURENT SERIES for $|z| < 3$
11. Evaluate $\int_{0}^{2\pi} \frac{d\theta}{3 - 2\cos \theta + \sin \theta}$
12. Show that $\int_{0}^{2\pi} \cos 3\theta \, d\theta = \frac{\pi}{12}$
13. Show that $\int_{0}^{\infty} \frac{\sin x}{x} \, dx = \frac{\pi}{2}$
14. Find the fixed points of the Transform $w = \frac{2z - 5}{z + 4}$
15. Prove that \( \int_0^{\infty} \frac{\cos h ax}{\cos h x} \, dx = \frac{\pi}{2 \cos \left( \frac{\pi a}{2} \right)} \), \(|a| < 1\)

16. Prove that \( \frac{1}{2\pi i} \int_{\gamma} \frac{z^2}{\zeta^2 + 4} \, d\zeta \)

17. Evaluate \( \int_0^1 ze^{2z} \, dz \)

18. If \( f(z) \) is a regular function of \( z \).

Prove that \( \left( \frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} \right) |f(z)|^2 = 4 |f'(z)|^2 \)

19. The demand \( x \) as a function of income, \( I \) is given as \( x = -75 + \frac{I}{2} \). Determine the income elasticity of demand at \( I = 200 \).

20. A firm requires 10,000 units of a material per annum. The cost of purchasing is Rs1 per unit, the cost of replenishment of stock of material is Rs25 and the cost of storing material is 12.5 percent per annum of the average rupee inventory. Find the optimum order size and the corresponding total cost using the calculus.

21. A company has for \( x \) items produced the total cost \( C \) and total revenue \( R \) given by equation \( C = 100 + 0.015x^2 \) and \( R = 3x \). Find how many items may be produced to maximise the profit. What is the profit?

22. Find the derivative of \( f(x) = x^6 \).

23. Find the derivative of \( f(x) = x^{-6} \).

24. Find the derivative of \( f(x) = 10x^6 \).

25. Find the derivative of \( f(x) = 3x^3 + 8 \).

26. Find the derivative of \( f(x) = (2x^2 - 6)(3x^3 + 8) \).

27. A manufacturer of a product finds that for the first 500 units that are produced and sold, the profit is Rs50 per unit. The profit on each unit beyond 500 is decreased by Rs0.10 times the number of additional units produced. What level of output will maximize profit?

28. The cost of fuel for running a train is proportional to the cube of the speed in kilometres per hour and is Rs64 per hour when the speed is 12kms. Other costs amount to Rs.2000 per hour. Find the most economical speed of the train in running a distance of 100 km.

29. Verify that \( f(x) = x^2 + y^2 \) has a minimum at \( (0,0) \).

30. The length of the diagonal of a box is to be 1 meter; find the maximum possible volume.

31. The post office will accept packages whose combined length and girth is at most 130 inches. (Girth is the maximum distance around the package perpendicular to the length;
for a rectangular box, the length is the largest of the three dimensions.) What is the largest volume that can be sent in a rectangular box?

34. A trough is to be formed by bending up two sides of a long metal rectangle so that the cross-section of the trough is an isosceles trapezoid. If the width of the metal sheet is 2 meters, how should it be bent to maximize the volume of the trough?

35. Find the largest rectangle (that is, the rectangle with largest area) that fits inside the graph of the parabola $y=x^2$ below the line $y=a$ (a is an unspecified constant value), with the top side of the rectangle on the horizontal line $y=a$.

36. The sum of two numbers is 24. Find the numbers if the sum of their squares is to be minimum.

37. Suppose a manufacturer can sell $x$ items per week at a price $P=20-0.001x$ rupees each when it costs $y=5x+2000$ rupees to produce $x$ items. Determine the number of items he should produce per week for maximum profit.

38. Find the values of $x$ for which the following function is a maximum or a minimum:

$$Y = 2x + 1/x^2 - 8x - 2$$

39. Prove that marginal cost (MC) must equal marginal revenue (MR) at the profit maximizing level of output.

40. Find the maximum and minimum values of the function $2x^3 + 3x^2 - 36x + 10$.

UNIT IV

I. MULTIPLE CHOICE QUESTIONS:

1. If $\theta$ approaches zero, then limit of $\sin(\theta)/\theta$ is _____.
   A. Cos ($\theta$)
   B. 0
   C. 1
   D. This is indeterminate
   ANSWER: C

2. Let’s say that $f”(k) = 0$ @ (13, -2). What does this mean?
   A. There is definitely an inflection point at that location.
   B. There might be an inflection point at that location.
   C. There definitely is not an inflection point at that location.
   D. There’s no way to tell without first knowing what the specific function is.
   ANSWER: B

3. What does $du$ equal in $\int 2x(x^2 + 1)^5 dx$?
   A. $2x$
   B. $2u du$
   C. $2x dx$
   D. $5u4$
   ANSWER: C

4. Which of the following is the best integration technique to use for $\int 2x(x^2 + 1)^3 dx$?
   A. The product rule.
B. The chain rule
C. The power rule
D. The substitution rule
ANSWER: D

5. What is the converted substitution form of \( \int 12x^2 (x^3 + 1)^5 \, dx \)?
A. \( 4\int u^5 \, du \)
B. \( \int u^5 \, du \)
C. \( \frac{1}{4} \int u^5 \, du \)
D. This cannot be solved by the substitution method
ANSWER: A

6. What is the integral of \( (3t - 1)^3 \, dt \)?
A. \( \frac{1}{12}(3t - 1)^4 + C \)
B. \( \frac{1}{12}(3t - 4)^4 + C \)
C. \( \frac{1}{4}(3t - 1)^4 + C \)
D. \( \frac{1}{4}(3t - 1)^3 + C \)
ANSWER: A

7. Evaluate the integral of \( \frac{dx}{x + 2} \) from -6 to -10.
A. \( 2^{1/2} \)
B. \( \frac{1}{2} \)
C. \( \ln 3 \)
D. \( \ln 2 \)
ANSWER: D

8. Integrate \( x\cos (2x^2 + 7) \, dx \).
A. \( \frac{1}{4}\sin (2x^2 + 7) + C \)
B. \( \frac{1}{4}\cos (2x^2 + 7) + C \)
C. \( \frac{(\sin \theta)}{4(x^2 + 7)} + C \)
D. \( \sin (2x^2 + 7) + C \)
ANSWER: A

9. Find the integral of \( 12 \sin^5 x \cos x \, dx \) if the lower limit is 0 and the upper limit is \( \pi/2 \)
A. 0.2
B. 0.333
C. 0.433
D. 0.533
ANSWER: A

10. Evaluate the integral of \( \ln x \, dx \), the limit are 1 and e
A. 0
B. 1
C. 2
D. 3
ANSWER: B
11. Find the area of the region bounded by \( y^2 = 8x \) and \( y = 2x \).
   A. 1.22 sq. units
   B. 1.33 sq. units
   C. 1.44 sq. units
   D. 1.55 sq. units
   ANSWER: B

12. What is the integral of \( \cos 2x \sin 2x \, dx \)?
   A. \( \frac{e^{\sin 2x}}{2} + C \)
   B. \( -\frac{e^{\sin 2x}}{2} + C \)
   C. \( -e^{\sin 2x} + C \)
   D. \( e^{\sin 2x} + C \)
   ANSWER: A

13. Find the integral of \( \frac{e^x - 1}{e^x + 1} \) \, dx
   A. \( \ln (e^x - 1)^2 + x + C \)
   B. \( \ln (e^x + 1) - x + C \)
   C. \( \ln (e^x - 1) + x + C \)
   D. \( \ln (e^x + 1)^2 - x + C \)
   ANSWER: D

14. Evaluate the integral of \( \frac{2\log_{10} e}{x} \) from 1 to 10.
   A. 2.0
   B. 49.7
   C. 3.0
   D. 5.12
   ANSWER: A

15. Evaluate the integral of \( \cos x \) \, dx limits from \( \frac{\pi}{4} \) to \( \frac{\pi}{2} \).
   A. 0.423
   B. 0.293
   C. 0.923
   D. 0.329
   ANSWER: B

16. What is the primary difference between using anti-differentiation when finding a definite versus an indefinite integral?
   A. Indefinite integrals don’t have defined limits.
   B. Definite integrals have defined limits.
   C. The constant of integration is, C.
   D. There is no difference between definite and indefinite integrals.
   ANSWER: C

17. What is the one thing done in anti-differentiation that has no counterpart in differentiation?
A. Adding a constant C.
B. Subtracting a constant C.
C. Dividing the new exponent by a constant C.
D. Nothing, they are equally matched step by step.
ANSWER: A

18. What is a necessary condition for L’ Hospital’s rule to work?
A. The function must be determinate.
B. The function must be indeterminate.
C. The function must be inconsistent.
D. The function must possess at least three non-zero derivatives.
ANSWER: B

19. What is the second step of performing anti-differentiation?
A. Divide the coefficient by the old exponential value.
B. Subtract the new exponential value from the coefficient.
C. Multiply the coefficient by the new exponential value.
D. Divide the coefficient by the new exponential value.
ANSWER: D

20. \[ \int \frac{1}{x} \, dx = \]
A. Undefined because you cannot divide by 0.
B. \( \log_e(x) \)
C. \( \ln(x) \)
D. \( \ln(x) + C \)
ANSWER: D

21. The value of the improper integral
\[ \int_0^1 x \ln(x) \, dx \]
A. \( \frac{1}{4} \)
B. 0
C. \(-1/4\)
D. 1
ANSWER: C

22. Value of the definite integral
\[ \frac{\pi}{2} \int_{\frac{\pi}{2}}^{\infty} \frac{\sin 2x}{1 + \cos x} dx \]

is

A. -2ln2
B. 2
C. 0
D. \((\ln 2)^2\)

ANSWER: D

23. The function \( f(x) = 3x(x - 2) \) has a
A. minimum at \( x = 1 \)
B. maximum at \( x = 1 \)
C. minimum at \( x = 2 \)
D. maximum at \( x = 2 \)

ANSWER: A

24. What is the derivative of \( f(x) = |x| \) at \( x = 0 \)
A. 1
B. -1
C. 0
D. Does not exist

ANSWER: A

25. If \( \phi(x) = \int_{x^2}^{0} \sqrt{t} dt \), then \( \frac{d\phi}{dx} \)
A. \( 2x^2 \)
B. \( \sqrt{x} \)
C. 0
D. 1

ANSWER: D

26. The function \( f(x) = x^3 - 6x^2 + 9x + 25 \) has
A. a maxima at \( x = 1 \) and a minima at \( x = 3 \)
B. a maxima at \( x = 3 \) and a minima at \( x = 1 \)
C. no maxima, but a minima at \( x = 1 \)
D. a maxima at \( x = 1 \), but no minima

ANSWER: B

27.
\[
\lim_{x \to 0} \frac{\sin^2 x}{x} \quad \text{is equal to}
\]
A. 0
B. \infty
C. 1
D. -1
ANSWER: A

28. If \( f(0) = 2 \) and \( f(x) = 1 / (5-x^2) \), then lower and upper bound of \( f(1) \) estimated by the mean value theorem are
A. 1.9, 2.2
B. 2.2, 2.25
C. 2.25, 2.5
D. None of these
ANSWER: B

29. Maxima and Minima occur
A. simultaneously
B. Once
C. Alternately
D. Rarely
ANSWER: C

30. If \( x + y = k, \ x > 0, \ y > 0 \), then \( xy \) is maximum when
A. \( x = ky \)
B. \( kx = y \)
C. \( x = y \)
D. None of these
ANSWER: C

31. Physically, integrating the following means-
\[
\int_a^b f(x) \, dx
\]
A. area under the curve from \( a \) to \( b \)
B. area to the left of point \( a \)
C. area to the right of point \( b \)
D. area above the curve from \( a \) to \( b \)
ANSWER: A

32. The mean value of a function \( f(x) \) from \( a \) to \( b \) is given by
33. The exact value of the following is mostly near to-
\[ \int_{0.2}^{2.2} xe^x \, dx \]

A. 7.8036  
B. 11.807  
C. 14.034  
D. 19.611  
ANSWER: B

34. \[ \int_{0.2}^{2} f(x) \, dx \] for
\[ f(x) = x, \quad 0 \leq x \leq 1.2 \]
\[ = x^2, \quad 1.2 < x \leq 2.4 \]
most nearly

(A) 1.9800  
(B) 2.6640  
(C) 2.7907  
(D) 4.7520

35. The area of a circle of radius \( a \) can be found by the following integral
36. Velocity distribution of a fluid flow through a pipe varies along the radius and is given by $v(r)$. The flow rate through the pipe of radius $a$ is given by:

\[
(A) \int_0^a (a^2 - x^2) \, dx \\
(B) \int_0^{2\pi} \sqrt{a^2 - x^2} \, dx \\
(C) 4\int_0^a \sqrt{a^2 - x^2} \, dx \\
(D) \int_0^a \sqrt{a^2 - x^2} \, dx
\]

**ANSWER: C**

37. The integral $\int_0^1 \frac{2x}{x^2 + x + 1} \, dx$ is equal to

\( a. \ \log 3, \)
\( b. \ \log 3 - \frac{\pi \sqrt{3}}{9}, \)
\( c. \ \log 3 + \frac{\sqrt{3}}{9}, \)
\( d. \ \log 3 - \frac{\sqrt{3}}{9}. \)

**ANSWER: B**

38. The integral $\int_0^1 \frac{dx}{x^4 + 1}$ is equal to
39. \[ \lim_{x \to 0} \frac{x^2 \sin(x) - e^{x^2}}{\cos(x + \frac{\pi}{2})} \] is

A. 0  
B. 1  
C. 2  
D. 3  

**ANSWER: A**

40. Value of \( \lim_{x \to 0} (1 + \sin(x)) \csc(x) \)

A. 0  
B. e  
C. 2  
D. 3  

**ANSWER: B**

41. Physically, integrating \( \int_a^b f(x) \, dx \) means finding the

A. area under the curve from a to b  
B. area to the left of point a  
C. area to the right of point b  
D. area above the curve from a to b  

**Solution**  
Answer A

42. The mean value of a function \( f(x) \) from \( a \) to \( b \) is given by

(A) \( \frac{f(a) + f(b)}{2} \)

(B) \( \frac{f(a) + 2f\left(\frac{a + b}{2}\right) + f(b)}{4} \)

(C) \( \frac{\int_a^b f(x) \, dx}{b-a} \)

(D) \( \frac{\int_a^b f(x) \, dx}{b-a} \)
43. The exact value of \( \int_{0.2}^{2.2} xe^x \, dx \) is most nearly

(A) 7.8036
(B) 11.807
(C) 14.034
(D) 19.611

Answer B

44. The area of a circle of radius \( a \) can be found by the following integral

(A) \( \int_0^a (a^2 - x^2) \, dx \)
(B) \( \int_0^{2a} \sqrt{a^2 - x^2} \, dx \)
(C) \( 4 \int_0^a \sqrt{a^2 - x^2} \, dx \)
(D) \( \int_0^a \sqrt{a^2 - x^2} \, dx \)

Answer C

45. \( \int_{0.2}^2 f(x) \, dx \) for

\[ f(x) = \begin{cases} 
  x, & 0 \leq x \leq 1.2 \\
  x^2, & 1.2 < x \leq 2.4 
\end{cases} \]

most nearly

(A) 1.9800
(B) 2.6640
(C) 2.7907
(D) 4.7520

Answer C
II SHORT ANSWER TYPE QUESTIONS:

Integrate the following expressions (with respect to $x$):

1. $\int^9_4 \frac{x + 1}{x + 2\sqrt{x} - 3} \, dx.$
2. $\int 2 \sin(x) \cos(x) \, dx.$
3. $\int \frac{e^x}{1 + e^{2x}} \, dx.$
4. $\int_{\pi/2}^0 \sin(x)(4 \cos(x))e^{2 \cos(x)+1} \, dx.$
5. $\int \frac{6 \sin(x) \cos^2(x) + \sin(2x) - 23 \sin(x)}{(\cos(x) - 1)^2(5 - \sin^2(x))} \, dx.$
6. $\int \sqrt{x^2 - 4} \, dx.$
7. $\int x \cos(ax) \, dx.$
8. $\int \frac{x - 1}{2x - 1} \, dx.$
9. $\int \frac{\ln(x)}{x} \, dx.$
10. $\int \cos^2(x) \sin(x) \, dx.$
11. $\int x^5 + x^4 + 2x^3 + 2x^2 + 5x + 9 \frac{dx}{(x^2 + 1)^3}.$
12. $\int^7_2 \frac{x}{1 - \sqrt{2} + x} \, dx.$
13. $\int^4_3 \frac{20 \, dx}{x^2(2 + \frac{1}{x})(2 - \frac{1}{x})(\frac{2}{x} - 1)}.$
14. $\int \frac{1}{\sqrt{x} - x^2} \, dx.$
15. $\int x^4 \sin(x^2) \, dx$.  

16. $\int_0^{\pi/2} \frac{1}{1 + \sin(x)} \, dx$.  

17. $\int 2 \sqrt{1 - e^{2x}} \, dx$.  

18. $\int \frac{\sin(x) \cos(x)}{1 + \sin^4(x)} \, dx$.  

19. $\int \frac{\sqrt{2x - 4}}{\sqrt{2}x - 4 + \frac{\sqrt{2}}{2}x - 4} \, dx$.  

20. $\int_0^1 2x^3 \ln(x^2 + 1) \, dx$.  

21. $\int_0^4 |2 - 2x| + 1 \, dx$.  

22. $\int_0^2 \frac{\sin^2(x)}{1 + \sin^2(x)} \, dx$.  

23. Find the area of the region bounded by the curve $y = e^x$, the $x$–axis and the lines $x = 0$ and $x = 3$.  

24. Find the area of the region bounded by the curve $y = x^2$, the $x$–axis and the lines $x = 1$ and $x = 2$.  

25. Find the area of the region bounded by the parabola $y^2 = 4x$ and the line $y = x$.  

26. Find the derivative of $f(x) = \frac{(2x^2 - 6)}{(3x^3 + 8)}$.  

27. Find $\frac{dy}{dx}$ if $x^2 + y^2 = 2xy$.  

28. Find $f(x)$ so that $f'(x) = 2x$ and $f(3) = 7$.  

29. Suppose $v = t^2 + 11t - 25$, and $s(1) = 4$. Find $s(t)$.  

30. If $x^2 - xy + y^2 = 5$, find the value of $y''$.  

31.
32. \[ \int_4^9 \frac{x + 1}{x + 2\sqrt{x} - 3} \, dx. \]

33. \[ \int \sin(x) \cos(x) \, dx. \]

34. \[ \int \frac{e^x}{1 + e^{2x}} \, dx. \]

35. \[ \int_{\pi/2}^{\pi} \sin(x)(4 \cos(x))e^{2\cos(x)+1} \, dx. \]

36. \[ \int (3x^2 - \sqrt{5x} + 2) \, dx \]

37. \[ \int \left( \frac{1}{2x} - \frac{4}{x^2} + \frac{3}{\sqrt{x}} \right) \, dx \]

38. \[ \int \frac{x^2 + 3x - 2}{\sqrt{x}} \, dx \]

39. \[ \int (x^3 - 2x^2) \left( \frac{1}{x} - 5 \right) \, dx \]

40. An object is moving so that its speed after \( t \) minutes is \( v(t) = 1 + 4t + 3t^2 \) meters per minute. How far does the object travel during 3rd minute?

III LONG ANSWER TYPE QUESTIONS:

Integrate the following expressions:

1. \[ \int e^{6x} \sin(e^{3x}) \, dx \]
\[ \int \frac{x^3}{(x^2 + 5)^2} \, dx \]

2.

\[ \int \sin 3x \cos 5x \, dx \]

3.

\[ \int \frac{x^3 e^{x^2}}{(x^2 + 1)^2} \, dx \]

4.

\[ \int e^x \cos x \, dx \]

5.

\[ \int x^7 \sqrt{5 + 3x^4} \, dx \]

6.

\[ \int x^3 \cos (x^2) \, dx \]

7.

\[ \int x^5 e^{x^3} \, dx \]

8.

\[ \int \left( \frac{\ln x}{x} \right)^2 \, dx \]

9.

\[ \int x \sin x \cos x \, dx \]

10.

\[ \int (\ln x)^3 \, dx \]

11.

\[ \int x^2 e^{3x} \, dx \]

12.

\[ \int \arcsin 3x \, dx \]

13.
14. Find:
\[ \int \frac{1}{x^2 \left(1 + \frac{1}{x}\right)^2} \, dx \]
Evaluate each of the following integrals.
15. \[ \int \left(1 - \frac{1}{w}\right) \cos (w - 1r \cdot w) \, dw \]
16. \[ \int x^2 \left(3 - 10x^3\right)^4 \, dx \]
17. \[ \int \frac{x}{\sqrt{1 - 4x^2}} \, dx \]
18. \[ \int 3(y - 1) \, e^{y^3 - y} \, dy \]
19. If \( f(a+b-x) = f(x) \), prove that \( x \int_a^b x \, f(x) \, dx = (a + b)/2 \int_a^b f(x) \, dx \)
20. Evaluate \( \int_0^3 |x - 2| \, dx \), \( \int_1^2 |2x - 1| \, dx \)
21. Evaluate \( \int_0^1 f(x) \, dx \), where \( f(x) = |x| + |x - 1| + |x - 2| \)
22. Use definite integral to find the area of the region bounded by the curve \( y = |x| \), the axis and two lines \( x = -2 \) and \( x = 1 \).
23. Show that \( \int_0^b \log x/x \, dx = \frac{1}{2} \log(ba) \log (b/a) \).
24. Show that the differential equation, of which \( x^2 - y^2 = c(x^2 + y^2)^2 \) is a solution, is \( (x^3 - 3xy^2) \, dx = (y^3 - 3x^2y) \, dy \).
25. Solve the differential equation: \( dy/dx = 6x^2 + 2x + 3 \).
26. Suppose \( a(t) = 3t^2 \), \( s(0) = 3 \) and \( s(1) = 5 \). Find \( v(t) \) and \( s(t) \).
27. \[ \int_0^{\pi/2} \frac{1}{1 + \sin(x)} \, dx \]
28. If \( x^2 - xy + y^2 = 5 \), find the value of \( y' \).
29. Given \( f(x) = 3x^3 - 2x - 7 \), find the second derivative, \( f''(x) \) and the third derivative, \( f'''(x) \)
30. \[ \int \frac{x - 1}{2x - 1} \, dx \]
31. Find the area bounded by the curves- \( y=x^4-x^2 \) and \( y=x^2 \)
32. Find the volume of the solid obtained by revolving the region bounded by \( y=x-x^2 \) and the \( x \)-axis around the \( x \)-axis.
33. Compute the area of the surface formed when \( f(x)=x^2 \) between 0 and 2 is rotated around the \( y \)-axis.
34. Find the area between \( f(x) = -x^2 + 4x \) and \( g(x) = x^2 - 6x + 5 \).
35. Using integration, find the area of the region bounded by line \( 2y=5x+7 \), \( x \) axis and lines \( x=2 \) , \( x=8 \).
36. The monthly marginal cost for a product is \( MC = x + 30 \). If fixed costs are $50, find the total cost function for the month.
37. The marginal revenue function for a product is \( MR = 44 - 5x \). The marginal cost is \( MC = 3x + 20 \), and the cost of producing 80 units is $11400. (a) Find the profit function (b) Find the profit or loss from selling 100 units.

38. Find the total area between the curve \( y = x^3 \) and the x axis between \( x = -2 \) and \( x = 2 \).

39. Evaluate the definite integral in each problem.

\[
\int (1 - t)^9 \, dt \quad \Rightarrow
\]

40. Evaluate definite integral for the function

\[
\int (x^2 + 1)^2 \, dx \quad \Rightarrow
\]
UNIT - I

I MULTIPLE CHOICE QUESTIONS:

1. A contract is made where:
   A. X agrees with Y to discover a treasure by magic.
   B. X bids at a public auction
   C. A takes a seat at home
   D. A sit in a public Omni bus.
   ANSWER D

2. A Void Contract
   A. Is void from the very beginning?
   B. Enforceable at the option of both the parties.
   C. Enforceable at the option of one party
   D. Not enforceable in the court of law
   ANSWER D

3. In case of void agreements, collateral transactions are
   A. Also void
   B. Unenforceable
   C. Not affected
   D. Illegal
   ANSWER A

4. Undue influence can be exercised only between the parties who are:
   A. Related to each other
   B. Not related to each other
   C. Friendly to each other
   ANSWER A

5. Which of the following persons can perform the contract?
   A. Promisor alone
   B. Legal representative of promisor
   C. Agent of the promisor
   D. All of them
   ANSWER D

6. Which of the following is not a legal requirement of a valid consideration?
   A. It must not move at the desire of the promisor
   B. It must be lawful
   C. It must be real and not illusory
   D. It must be adequate
ANSWER A

7. Which of the following persons are not competent to contract?
   A. Minor
   B. Person disqualified by law
   C. Person of unsound mind
   D. All of the above
   ANSWER D

8. Consent is free under section 14 if not caused by
   A. Coercion & undue influence
   B. Fraud and misrepresentation
   C. Mistake subject to the provisions of sections 20, 21 and 22
   D. All the above
   ANSWER D

9. Which is correct?
   A. Proposal + acceptance = promise
   B. Promise + consideration = agreement
   C. Agreement + enforceability = contract
   D. All the above.
   ANSWER D

10. The Bailment of goods as security for payment of a debt or performance of a promise is called:
    A. Pledge
    B. Bailment
    C. Contingent contract
    D. Agreement
    ANSWER A

11. The delivery of goods by one person to another for some purpose, upon a contract and that they shall, when the purpose is accomplished, be returned or otherwise disposed of by accounting to the directions of the person delivering them, then it is called:
    A. Contingent contract
    B. Bailment
    C. Pledge
    D. Contract of indemnity
    ANSWER B

12. In contract of guarantee, the person to whom guarantee is given is known as:
    A. Creditor
    B. Surety
    C. Principal debtor
    D. Debtor
    ANSWER A
13. In contract of guarantee, the person in respect of whose default the guarantee is given, is known as:
   A. Creditor
   B. Surety
   C. Principal debtor
   D. Debtor
   ANSWER C

14. Promises which form the consideration or part thereof, for each other under section 2(F) are called
   A. Acceptances for different proposals
   B. Agreements
   C. Reciprocal promises
   D. Consideration
   ANSWER C

15. Express contract means a contract made by
   A. Words either spoken or written.
   B. Documents.
   C. Both words and documents.
   D. All of the above.
   ANSWER D

16. Consideration should be something in return of promise which:
   A. Both the law and parties regard, as having some value
   B. Only law regards as having some value
   C. Only the parties regard some value
   D. Only adequate value necessary
   ANSWER B

17. Consent is free if not caused by–
   A. Coercion & undue influence
   B. Fraud and misrepresentation
   C. Mistake
   D. All of the above
   ANSWER D

18. Which of the following person do not fall under the category of persons of unsound mind?
   A. Drunkards
   B. Lunatics
   C. Idiots
   D. Blind person.
   ANSWER D
19. The contract is VOID if free consent is missing in the contract on account of:
   A. Coercion
   B. Undue influence
   C. Fraud
   D. Mistake
   ANSWER D

20. In Indian Contract Act, the term consensus ad idem means
   A. Parties under a mistake
   B. Parties under the free consent
   C. Parties agreeing upon the same thing in same sense
   D. None of these
   ANSWER C

21. A contract to perform a promise or discharge the liability of a third party is called—
   A. Contract of indemnity
   B. Contract of agency
   C. Contract of guarantee
   D. Contract of warranty
   ANSWER C

22. Sonia contracts with Anshul to buy a necklace, believing it is made of pearls whereas in
    fact it is made of imitation pearls of no value. Anshul knows that Sonia is mistaken and
    takes no steps to correct the error. Now Sonia wants to cancel the contract on the basis of
    fraud. Which of the following statement is correct?
   A. Sonia can cancel the contract alleging fraud
   B. Sonia cannot cancel the contract
   C. Sonia can cancel the contract alleging undue influence
   D. Sonia can claim damages
   ANSWER B

23. Which of the following is false with respect to minor entering a contract?
   A. An agreement with or by a minor is void ab initio
   B. A minor can be a beneficiary of a contract
   C. The contracts involving a minor as a beneficiary may be enforced at the option of
      the third party
   D. A minor cannot ratify a contract on attaining majority
   ANSWER C

24. Goods displayed in a shop with a price tag is an
   A. Offer
   B. Invitation to offer
   C. Counter offer
   D. None of the above.
   ANSWER B
25. Anuj agrees to pay ` 10,000 to Manoj if a certain ship returns within a year. However, the ship sinks within the year. In this case, the contract becomes:
   A. Valid
   B. Void
   C. Voidable
   D. Illegal
   ANSWER B

26. A invites B for coffee in Coffee day Restaurant and B accepts the invitation. On the appointed date, B goes there but A does not come. In this case
   A. B has no remedy against A.
   B. B has to wait for another invitation from A.
   C. B can sue A for not honouring his words.
   D. A has to invite B again, to keep the promise.
   ANSWER A

27. When, at the desire of the promisor, the promisee or any other person has done or abstained from doing or, does or abstain from doing or promises to do or to abstain from doing something, such act or abstinence or promise under section 2 is called
   A. Reciprocal promise
   B. Consideration for the promise
   C. Counter offer
   D. Acceptance.
   ANSWER B

28. Where a contract has to be inferred from the conduct of parties, it is called
   A. Express contract.
   B. Implied contract.
   C. Tacit contract.
   D. Unlawful contract
   ANSWER B

29. According to enforceability, the contracts may be classified as
   A. Valid contracts.
   B. Void contracts.
   C. Voidable contracts.
   D. All of the above.
   ANSWER D

30. Voidable contract is one
   A. Which is lawful.
   B. Which is invalid.
   C. Which is valid as long as it is not avoided by the party entitled to do so.
   D. Which is unlawful.
32. A minor was facing a criminal prosecution for smuggling drugs. He borrowed Rs. 5000 to hire an advocate to defend him in the court of law. What is the remedy available to the creditor if the minor does not return the money on his own?
A. The creditor cannot recover the amount from the minor since a contract with a minor is void ab initio
B. The amount of loan can be recovered from minor’s property since it is a loan for necessaries
C. The creditor can recover his amount of loan from the minor on his (minor’s) attaining the age of majority
D. The creditor can recover his amount from the parent or guardian of the minor
ANSWER A

33. Undue influence can be presumed between
A. Guardian and Ward
B. Mother and Daughter
C. Doctor and Patient
D. All of the above
ANSWER D

34. Wagering Agreement is a _____________ agreement
A. Valid
B. Voidable
C. Void
D. Illegal
ANSWER C

35. Identical offers made by two parties to each other, in ignorance of each other’s offer are known as
A. Counter Offer
B. Cross-Offers
C. Standing Offer
D. None of the above
ANSWER B

36. Which of the following feature is not essential for a contract:
A. It should be in writing only
B. Free consent of parties competent to contract
C. Lawful consideration and with a lawful object
D. It should not be declared void expressly
ANSWER A
37. Which of the following statement regarding coercion is not true:
   A. Coercion involves unlawful detaining or threatening to detain any property
   B. The act of coercion may be directed at any person and not necessarily at the other party to the agreement
   C. Coercion gives one person an advantage of a position of power over another person
   D. The act of coercion must be done with the object of inducing or compelling any person to enter into an agreement
   ANSWER B

38. Contingent contract means:
   A. Suit entrusted to any person to abide by the result of any game or other uncertain event on which may wager is made
   B. A contract to do or not to do something, if some event, collateral to such contract, does or does not happen
   C. Agreements which are not certain, or capable of being made certain
   D. Every agreement, by which any party thereto is restricted absolutely from enforcing his rights under or in respect of any contract
   ANSWER B

39. What is the meaning of novation:
   A. Rescinding of a contract
   B. Alteration of a contract
   C. Change in provisions of a contract
   D. Substituting an old contract for a new one
   ANSWER D

40. Which of these contracts has three parties consisting of creditor, principle debtor and surety:
   A. Contract of indemnity
   B. Contract of surety
   C. Contract of pledge
   D. Contract of guarantee
   ANSWER D

41. If the proposer prescribes the mode & manner of acceptance, the acceptance
   A. Can be in any manner & mode
   B. Should be in the manner & mode prescribed
   C. Can be in any reasonable mode & manner
   D. All the above
   ANSWER B

42. Law of contract primarily
A. Specifies the circumstances in which promises are binding on the parties to the contract
B. Lays down certain norms by which the parties are bound
C. Lays down the circumstances under which a promise may be made
D. All the above
ANSWER D

43. A person is deemed to be in a position to dominate the will of another by undue influence if the mental capacity is affected temporarily or permanently by
A. Reason of age
B. Reason of illness
C. Mental or bodily distress
D. All the above.
ANSWER D

44. The term consensus ad-idem means
A. General consensus
B. Reaching an agreement
C. Meeting of minds upon the same thing in the same sense
D. All the above.
ANSWER C

45. Contract without consideration made in writing & registered and made on account of natural love and affection is
A. Void
B. Voidable
C. Valid
D. Unenforceable
ANSWER C

II SHORT ANSWER TYPE QUESTIONS:

1. Define Agreement.
2. Define Contract.
3. When is the contract said to be performed?
4. State the essentials of a valid contract.
5. What do you understand by Consideration? Is it necessary in all the cases?
6. Difference between contract of Indemnity and Guarantee
7. ‘Every person is competent to contract” Comment
8. “A minor can be appointed as an agent”. Do you agree?
10. Define Bailment. What are the requisites for the contract of bailment?
11. What do you mean by ‘Proposal’ or ‘Offer’?
12. What do you understand by Capacity to Contract?
13. Who are competent and not competent to contract under Indian Contract Act, 1872?
14. “An agreement requires a meeting of minds” Comment.
15. What do you understand by ‘Coercion’?
16. What do you mean by ‘Undue Influence’? How it differs from Coercion?
17. What is Fraud? Discuss its effect on Contract.
18. What do you mean by ‘Misrepresentation’? Distinguish between Fraud and Misrepresentation.
19. What is ‘Mistake’?
20. “Contract without consideration is void”. What are the exceptions of this rule?
21. State the various rights and duties of Indemnified and Indemnifier.
22. Who is Bailee? State his rights and obligations
23. What is meant by the ‘Lien’?
24. Define ‘pledge’. Discuss the essential elements of a pledge.
25. What is the difference between the Contract of Bailment and Pledge.
26. ‘Material alteration renders the instrument void’. Elaborate
27. Write short notes on the following A. Quantum meruit and (B) Specific Performance
28. Distinguish between agency by estoppel and agency by holding out.
29. What are the essential features of contingent contracts?
30. Comment on the following:
   a) A voidable contract is valid till the aggrieved party opts to avoid it.
   b) An agreement to agree is a valid contract
31. “An agreement made without consideration is void”. With reference to the provisions of ICA, examine the validity of the statement and explain the cases in which statement does not apply.
32. Past consideration is no consideration. Comment
33. An agreement requires meeting of minds. Comment
34. Mere silence as to facts is not fraud. Do you agree? Justify
35. What is the legal effect of a minor’s misrepresentation of his age while entering into an agreement?

III LONG ANSWER TYPE QUESTIONS:

1. Define contract and essentials of a valid contract.
2. “All contracts are agreements but all agreements are not contracts”. Explain with suitable examples.
3. “An agreement enforceable by law is a Contract”. Comment. Discuss the essentials of a valid contract in brief.
4. What do you mean by ‘Proposal’ or ‘Offer’? Explain its various characteristics.
5. By giving definition of an acceptance explain the various general rules regarding acceptance of an offer.
6. What do you mean by the communication of acceptance? By describing the modes of revocation of it, explain is there any time limit of its revocation.
7. What are the factors concerning consent not a free one? Discuss their effect on validity of Contract.
8. What is ‘Mistake”? What are the kinds of it? Discuss the mistake of Law and its effect on Contract.
9. What do you mean by contract of indemnity? Discuss the right of indemnity holder. Discuss the difference of indemnity & Guarantee.
10. What is bailment? Discuss the right and duties of bailor & bailee.
11. What is pledge? Whether a person who is not the real owner of movable Property can pledge the goods?
12. Define continuing guarantee. When surety may discharge from his liability and when surety cannot discharge from his liability
13. What do you understand by 'Capacity to Parties’ to contract? Discuss the law regarding Minor’s agreements.
14. Define “Consideration”. What are the legal rules of consideration?
15. “Insufficiency of consideration is immaterial but an agreement without consideration is void.” Elaborate this statement.
17. “Goods can be pledged by the owner only” discuss. State the circumstances in which the goods can be pledged by non-owners.
18. “A contract is a contract from the time it is made and not from the time performance is due”. Comment.
19. “An agreement enforceable at law is a contract.” Explain.
20. State with suitable examples the circumstances under which a minor is bound by his contracts for necessaries as per Indian Contract Act.
21. When is consent said to be given under coercion? What is the liability of a person to whom money has been paid or goods have been delivered under coercion? How coercion differs from undue influence?
22. Explain each of the following statements:
   (i) “Amount paid under mistake of law cannot be recovered back.”
   (ii) Mere silence as to facts is not fraud.
23. When is a contract said to be induced by undue influence? Discuss the effect of undue influence on the formation of a contract.
24. Explain the doctrine of “Public Policy”. Discuss the agreements contrary to public policy.
25. Examine the legal position of:
   (i) Minor Promisor
   (ii) Minor Promisee
   (iii) Minor Agent
26. "An agreement enforcement by law is a contract." Discuss and bring out the essentials features of a valid contract. (June 2014)
27. Define fraud and point out its effects on the validity of a contract. How does it affect free consent? Give suitable examples to illustrate your answers. (June 2014)
28. When a contract is said to have been breached? Explain various remedies available to both the aggrieved party and the party which has breached the contract. (June 2017)
29. Explain “Free Consent”. Give at least five instances covering each type of situations where consent is not free. (June 2017)
30. Promise made by husband to his wife will not create any legally binding obligations. Explain using relevant case law. (June 2018)
31. The Indian Contract Act, 1872 contains explicit provisions under which certain agreement are expressly declared as void agreements. Briefly discuss such void agreements.
32. Explain briefly the legal provisions relating to Communication of “Offer” and “Acceptance”. Also state the grounds on which an offer can stand revoked. How can the acceptance be revoked? (June 2019)

33. Distinguish between the following: (June 2019)
   a) Contract of Guarantee and Contract of Indemnity
   b) Bailment and Pledge

34. Briefly explain the essential elements of the valid contract and discuss the validity of the oral contract between two parties to sell and purchase house property and car

35. “The Law of Contract is not the whole law of agreement nor is it the whole law of obligations.”—Salmond. Explain the scope of Law of Contracts.

UNIT - II

I  MULTIPLE CHOICE QUESTIONS:

   A. 5
   B. 7
   C. 6
   D. None of above
   ANSWER C

2. As per section 2, sub section 7 every kind of moveable property other than actionable Claim and money is called
   A. Goods
   B. Future goods
   C. Both A. and (B)
   D. None of above
   ANSWER A

3. Future goods mean goods to be manufactured or produced or acquired by the seller
   A. In future prescribed time
   B. After making of contract
   C. Before making of contract
   D. None of above
   ANSWER B

4. As per section 2(8), of the Sales of Goods Act, insolvent means a person
   A. Who has ceased to pay his debts in the ordinary course of business
   B. Who cannot pay his debts as they become due
   C. Both A. and (B)
   D. None of above
   ANSWER C

5. As per section 2(12), of the Sale of Goods Act, quality of goods includes
   A. State of goods
   B. Conditions of goods
6. The goods identified and agreed upon at the time a contract of sale is made are called
   A. Ordinary goods
   B. Specified goods
   C. Scheduled goods
   D. None of above
   **ANSWER B**

7. Section 4, of the Sale of Goods Act 1930, deals with
   A. Sale
   B. Agreement to sell
   C. Both A. and (B)
   D. None of above
   **ANSWER C**

8. A sold a stolen car to B which was subsequently recovered by the police from B’s possession and he (B) was forced to return the same to the true owner. Here, there is breach of implied condition as to
   A. Merchantability
   B. Fitness for buyer’s purpose
   C. Title
   D. None of these
   **ANSWER C**

9. A stipulation which is essential to the main purpose of the contract and if proved false, gives the buyer a right to terminate the contract, is legally known as
   A. Condition
   B. Warranty
   C. Guarantee
   D. None of these
   **ANSWER A**

10. When a person sells the goods by infringing the copying or trademark of the others, there is breach of an implied.
    A. Condition as to title
    B. Condition as to description
    C. Conditions as to merchantability
    D. None of these
    **ANSWER A**

11. The term condition is defined in which of the following Section of the Sale of Goods Act. 1930?
A. Section 12 (1)
B. Section 12 (2)
C. Section 12 (3)
D. Section 12 (4)
ANSWER B

12. According to implied 'warranty as to quiet possession' it is presumed that the buyer shall have the
A. Peaceful possession of the goods.
B. Right to use the goods as an owner.
C. Both
D. None of these
ANSWER C

13. In case of breach of condition, the buyer
A. Has no remedy
B. Can reject the goods.
C. Cannot reject the goods.
D. Can get the seller arrested
ANSWER B

14. Where the goods are sold by description, there is an implied condition that the goods shall
A. Be fit for buyer's purpose
B. Free from any defects
C. Correspond with the description
D. Free from any encumbrance
ANSWER C

15. The seller is required to supply the goods which shall be fit for buyer's purpose where the
A. Seller is the sole distributor of goods sold.
B. Seller knows the particular purpose of buyer.
C. Buyer makes his purpose clear and relies upon seller's skill and judgement.
D. Buyer is uneducated and the person of rural background.
ANSWER B

16. Which of the following types of conditions and warranties are covered by the Sale of Goods Act, 1930?
A. Express
B. Implied
C. Both A. and (B)
D. Only (B)
ANSWER C
17. As per the doctrine of caveat emptor incorporated in Section 16, there is no implied conditions or warranty in a contract of sale as to the
   A. Merchantability.
   B. Wholesomeness.
   C. Quality or fitness for buyer's purpose.
   D. None of these.
   ANSWER C

18. A warranty is a stipulation which is
   A. Essential to the main purpose of contract of sale.
   B. Essential for buyer's specific purpose.
   C. Collateral to the main purpose of contract of sale.
   D. None of these
   ANSWER C

19. Where the transfer of the property in the goods is to take place at a future time or subject to some condition, then such contract is called:
   A. An agreement to sell
   B. A contract to Sale
   C. Future Contract
   D. Conditional contract
   ANSWER A

20. Where the seller wrongfully neglects or refuses to deliver the goods to the buyer, the buyer may sue for:
   A. Damages for non-delivery
   B. Damages for non-acceptance
   C. Specific performance
   D. Compensation
   ANSWER A

21. ____________ is termed as consideration in a contract of sale:
   A. Exchange money
   B. Barter money
   C. Price
   D. Reward
   ANSWER C

22. The unpaid seller has right of stoppage of goods in transit only where the buyer
   A. Become insolvent
   B. Refuses to pay price
   C. Acts fraudulently
   D. All of these
   ANSWER A

23. An unpaid seller is having rights against
A. Goods only
B. The buyer only
C. Both goods and buyer
D. None of the above
ANSWER C

24. Under which of the circumstances unpaid seller loses his right of lien
A. By estoppel
B. Where seller waived the right of lien
C. Where the buyer or his agent lawfully obtains possession of the goods
D. Any of the above
ANSWER C

25. Seller has right of resale where
A. Goods are perishable
B. Seller has reserved such right.
C. Seller gives notice
D. All of these.
ANSWER D

26. The voluntary transfer of possession from one person to another is called
A. Transfer
B. Change of possession
C. Delivery
D. None of above
ANSWER (C)

27. The agent having in customary course of business as such agent authority either to sell goods or to consign goods for the purpose of sale or to buy goods or to raise money on the security of goods is called
A. Agent
B. Mercantile agent
C. Partner
D. None of above
ANSWER (B)

28. According section 5(2) subject to provision of any law for the time being in force a contract of sale may be
A. Made in writing
B. By words of mouth
C. Partly in writing or partly in words of mouth
D. All above ways
ANSWER A.

29. A stipulation in contract of sale with reference to goods which are the subject there of may be
A. A condition
B. A warranty
C. Both A. and (B)
D. None of above
ANSWER (C)

30. Where an unpaid seller has made part delivery of the goods he may exercise his Right of _______
   A. Return of remaining goods
   B. Lien on the remaining goods
   C. Sale to any other person
   D. None of above
ANSWER (B)

31. Delivery of key of the warehouse by the seller to the buyer will amount to:
   A. Symbolic Delivery
   B. Actual Delivery
   C. Constructive Delivery
   D. No delivery
ANSWER A.

32. The Right of Lien is exercised:
   A. To retain the possession of goods
   B. To regain the possession of goods
   C. To resell the goods
   D. To transfer the goods
ANSWER A.

33. In case of an agreement to sell, action against a third party for damaging the goods can be taken by:
   A. The seller
   B. The buyer
   C. Both
   D. None
ANSWER A.

34. In case of ‘sale or return’ the buyer is deemed to have accepted the goods when:
   A. He does not intimate to the seller that he has rejected them
   B. He retains without intimating the seller that he has rejected them
   C. He rejects the goods but does not intimate the seller
   D. He pledges the goods
ANSWER A.

35. Caveat Emptor means
   A. Let the buyer beware
B. Let the seller beware
C. Let the government beware
D. None of the above
ANSWER A.

A. Gratuitous transfer of possession from one person to another
B. Involuntary transfer of possession from one person to another
C. Voluntary transfer of possession from one person to another
D. Transfer of possession irrespective of whether it is gratuitous, involuntary or voluntary, from one person to another.
ANSWER C

37. 'Delivery' within the meaning of section 2(1) of the Sale of Goods Act, 1930, can be
A. Actual
B. Constructive
C. Symbolic
D. Either (a) or (b) or (c).
ANSWER D

38. "Mercantile agent" means the person
A. Who sell goods, or consigns for the purpose of sell, or buy goods or raise money on security of goods
B. Who only sell or purchase
C. Who only consign goods
D. Who only transfer goods.
ANSWER A

39. 'Price' under section 2(10) of the Sale of Goods Act, 1930, means
A. The money consideration
B. The consideration given in the form of goods
C. Partly money consideration and partly consideration in goods
D. Either (a) or (b) or (c).
ANSWER A

40. The word "Property" in the Sale of Goods Act, 1930 means
A. Seller or transferer
B. Buyer or purchaser
C. Goods or subject matter
D. Ownership or title.
ANSWER D

41. 'Quality of goods' under section 2(12) of the Sale of Goods Act, 1930 has a reference
A. Fitness for a particular purpose
B. State or condition
C. Description
D. Either (a) or (b) or (c).
ANSWER A

42. It is a standard rule that risk follows ____________
A. Property
B. Seller
C. Buyer
D. Possession
ANSWER A

43. Sale under Sale of Goods Act, 1930 is an ___________ contract
A. Executed Contract
B. Executory Contract
C. Executable Contract
D. None of The above
ANSWER A

44. As per section 4, of The Sale of Goods Act, a contract of sale may be
A. Absolute
B. Conditional
C. Both (a) and (b)
D. None of Above
ANSWER C

45. A stipulation in contract of sale with reference to goods which are the subject there of may be
A. A Condition
B. A Warranty
C. Both (a) and (b)
D. None of Above
ANSWER C

II SHORT ANSWER TYPE QUESTIONS:

1. Define a contract of sale of goods.
2. Discuss the essential characteristics of a contract of sale of goods.
3. Define Contingent goods?
4. Distinguish between Sale Agreement and Hire Purchase Agreement.
5. What is meant by specific goods?
6. Define a Condition.
7. What is a Warranty?
8. When can ‘condition’ be treated as ‘warranty’? Comment.
9. What is meant by Condition as to Merchantable Quality?
10. What are the conditions to be satisfied in the condition of Fitness?
11. Explain the meaning of sale by sample, as well as, by description.
12. What is condition as to wholesomeness?
13. Which implied warranty results in presuming that when the goods are sold they are delivered free of any problems?
14. “A breach of condition cannot be treated as a breach of warranty.” Comment.
15. “Custody or control of goods” implies “Property in Goods”. Comment.
16. When a property passes to the buyer under “goods on approval” or “on sale or return”?
17. Write a note on Instalment Deliveries.
18. What is Ex-Ship Contract.
19. Who is an unpaid seller?
20. Distinguish between unpaid seller’s right of lien and right of stoppage in transit. When can he resell the goods?
21. What are the rights of an unpaid seller against the goods?
22. Distinguish between particular lien and general lien.
23. Discuss two remedies available to a buyer against the seller for a breach of a contract of sale.
24. What are the rules as to delivery of goods by instalments under Sale of Goods Act?
25. “Risk prima facie passes with ownership.” Comment.
26. Who is an unpaid seller? What are his rights? (June 2014)
   a. Contract of Sale
   b. Unpaid Seller
27. Briefly explain the rules related to transfer of property under the Sale of Goods Act, 1930 (June 2016)
28. In certain cases, non-owners can pass a better title than they themselves have. Elucidate (June 2016)
29. Write short notes on Particular Lien & General Lien.
30. Write short notes on Rights of an unpaid seller.
32. Differentiate between:
   a. Condition and warranty
   b. Sale and Agreement to Sell
33. Can a seller who parted with possession of goods to a carrier resume their possession? If so when?
34. A purchased rice from B being the content of a godown. A had paid earnest money and had taken delivery of a part of rice. Before the rest could be taken away, it was destroyed by fire. Who will bear the loss?
35. Write short note on following:–
   a. Contract of Sales of Goods
   b. Goods
   c. Price

III   LONG ANSWER TYPE QUESTIONS:
1. State briefly the essential element of a contract of sale under the Sale of Goods Act, 1930. Examine whether there should be an agreement between parties in order to constitute a sale under the said Act.

2. Distinguish “sale” from an “agreement to sell” under the Sale of Goods Act, 1930.


4. Define the term ‘warranty’. What are the kinds of implied warranties under the provisions of the Sale of Goods Act, 1930?

5. What do you understand by an implied condition? State the Conditions implied in a contract of sale of goods.

6. Distinguish between Condition as to fitness of goods for buyer’s purpose and condition as to wholesomeness.

7. Explain the doctrine of ‘caveat emptor’ with its exceptions.

8. “In a contract for the sale of goods, there is no implied condition or warranty as to the quality of the goods or their fitness for any purpose.” Comment.

9. “The seller of goods is not bound to disclose defects in the goods that he intends to sell.” Comment.

10. “In a contract of sale of goods, the buyer has always to bear the risk.” Comment.

11. In a contract of sale of goods “no one can transfer a better title than what he himself has”-Explain.

12. Explain the rules regarding transfer of ownership from seller to the buyer.

13. Discuss briefly the cases in which a seller can give a better title to the goods than he himself has.

14. Explain the term “Delivery” as used in a contract of sale and state the rules regarding valid delivery of goods.

15. Explain the different modes of effective delivery of goods.

16. When can a seller of goods be deemed to be an unpaid seller? What are his rights against the A. goods; and (B) the buyer personally?

17. Explain the nature of right of lien. When can the unpaid seller exercise the right of lien? Under what circumstances is the lien terminated?

18. Discuss the rules regarding the duration of transit. When does it come to end?

19. What are the conditions required to be fulfilled for the exercise of the right of stoppage in transit?

20. Can an unpaid seller exercise his right of lien or stoppage in transit on the goods transferred by way of sale or other disposition by the buyer?

21. ‘The right of stoppage in transit is an extension of an unpaid seller’s right to lien.’ Comment.

22. What are the remedies available to the buyer in case of breach of a contract of sale by the seller?

23. Under what circumstances can an unpaid seller exercise the right of resale?

24. Define sale and agreement to sale, discuss its essentials. What is the effect, when goods perished before contract of sale & after agreement to sale?

25. Explain clearly the essential elements which must co-exist for constituting a valid sale of goods. In what respect does a “sale” differ from an “agreement to sell”?

26. Distinguish between following:-(June 2014)
   (i) Sale and Agreement to Sell.
   (ii) Conditions and Warranties.
27. "Delivery of goods does not amount to acceptance of goods." Comment. (June 2014)
28. Discuss the rule of Caveat Emptor. What are the exceptions to this rule available under Sale of Goods Act, 1930? Explain (June 2016)
29. Distinguish between “Sale” and “Agreement to Sell”. Explain the rights of unpaid seller against the goods. (June 2016)
30. Conditions and Warranties are considered as exceptions to the general rule of “caveat emptor”. Discuss. (June 2018)
31. Explain the circumstances under which sale by non-owners is regarded as legitimate sale and the buyer acquires better title than that of the seller over the goods. (June 2018)
32. Explain in brief the rules relating to Delivery of Goods. Explain with examples the rules relating to i) Part delivery ii) Delivery by instalments iii) Delivery of wrong quantity. (June 2019)
33. Distinguish between “Condition” and “Warranty”. Briefly discuss the implied conditions and warranties in a contract of sale. (June 2019)
34. In what cases has an unpaid seller a lien over the goods? Would his lien he destroyed if he makes part delivery of the goods? When does the lien come to an end.
35. Discuss the rights and liabilities of - (a) the seller, and (b) a buyer, of goods under a contract of sale for its breach.

UNIT - III

I MULTIPLE CHOICE QUESTIONS:

1. The term company is defined under which sec of the Act?
   A. Sec 3(1)
   B. Sec 4(2)
   C. Sec 2(4)
   D. Sec 1(3)
   ANSWER A

2. Property of the company belongs to:
   A. Company
   B. Shareholders
   C. Members
   D. Promoters
   ANSWER B

3. Which company shares can be freely transferable
   A. Private company
   B. Public company
   C. Both a & b
   D. None of the above
   ANSWER B

4. Maximum number of members in case of private company is:
   A. 50
5. XYZ company conducted an AGM on 1st September 2007. On that day due to fire accident in the hall. All shareholders died. Will the company be in existence?
   A. Yes
   B. No
   ANSWER A

6. The liability of members if company is limited by guarantee.
   A. Unpaid value of shares
   B. Guarantee amount
   C. Unlimited liability
   D. None of the above
   ANSWER B

7. The liability of members if company is limited by shares
   A. Unpaid value of shares
   B. Guarantee amount
   C. Unlimited liability
   D. None of the above
   ANSWER A

8. The companies which are formed under special charter granted by the king or queen of England are called
   A. Statutory companies
   B. Registered companies
   C. Chartered companies
   D. None of these
   ANSWER C

9. The companies which are formed under special Act. Those companies are called as
   A. Chartered companies
   B. Statutory companies
   C. Registered companies
   D. None of these
   ANSWER B

10. The companies which are formed under Companies Act 2013. They will be called as
    A. Chartered companies
    B. Statutory companies
    C. Registered companies
    D. None of these
    ANSWER C
11. XYZ Co, is having 15% share capital held by X Company and 50% held by Central Government and 10% held by State Government and 25% held by other people then that company will be
   A. Government Company
   B. Private Company
   C. Public Company
   D. None of these
   ANSWER C

12. The Board of Directors can exercise the power to appoint directors in the case of.
   A. Additional Directors.
   B. Filling up the Casual vacancy.
   C. Alternate Directors.
   D. All the above.
   ANSWER D

13. In the process of conversion of a private company into a public company which prospectus must be issued
   A. Deemed prospectus
   B. Shelf prospectus
   C. Statement in lieu of prospectus
   D. None of the above
   ANSWER A

14. A person cannot be a director of more than …………… as per the Companies (Amendment) Act, 2000.
   A. 5 companies.
   B. 10 companies.
   C. 15 companies.
   D. 20 companies.
   ANSWER C

15. ______ is the conclusive evidence in case of company that statutory requirements have complied with
   A. Certificate of Incorporation
   B. Certificate of commencement of Business
   C. Both
   D. None of the above
   ANSWER A

16. The Whistle Blower Policy was recommended by……………..
   A. N.R.Narayana Moorthy
   B. Anil Ambani
   C. Chris Gopalakrishnan
   D. Asim Premji
ANSWER A

17. A company can change its name at its own discretion by passing _________
   A. Ordinary resolution
   B. Special resolution
   C. Boards resolution
   D. None of the above

   ANSWER C

18. Any change in the address of the registered office must be communicated to the registrar with in:
   A. 15 days
   B. 30 days
   C. 1 Month
   D. 12 months

   ANSWER A

19. In the MOA there are 6 classes. We can alter all clauses except one clause. What is that clause?
   A. Objects clause
   B. Name clause
   C. Association clause
   D. None of these

   ANSWER C

20. Ultra vires means
   A. Beyond the power
   B. Within the power
   C. Both
   D. None of the above

   ANSWER A

21. Contracts made after promotion but before the grant of Certificate of Incorporation are called ________
   A. Provisional contracts
   B. Pre incorporation contracts
   C. Preliminary contracts
   D. Both (B) & (C)

   ANSWER D

22. Pre incorporation contract is also known as ________
   A. Provisional
   B. Preliminary
   C. Illegal
   D. Legal

   ANSWER A
23. ______ are the prospectus issued instead of full prospectus
   A. Abridged
   B. Statement in lieu
   C. Shelf
   D. Red herring
   ANSWER A

24. Which one of the following has a right to claim compensation for any loss due to misstatement in prospectus
   A. Purchasing shares in Primary Market
   B. Secondary Market
   C. Subscribers to memo.
   D. All the above
   ANSWER A

25. Voting in a company Meeting can be through.
   A. Ballot
   B. Raising hands
   C. Raising voice
   D. All of these.
   ANSWER D

26. Alteration of objects clause of MOA of a company requires
   A. Special resolution
   B. Approval of CLB
   C. Ordinary resolution
   D. Approval of ROC
   ANSWER A.

27. AOA is a
   A. Public document
   B. Managerial document
   C. Private document
   D. Internal document
   ANSWER D

28. Situation clause in Memorandum of association contains:
   A. The exact address of the registered office
   B. The name of the state in which the company will have its registered office
   C. The name of the country in which the company will have its registered office
   ANSWER (B)

29. Memorandum of association governs the relationship of the company:
   A. With the outside world
B. With the shareholders
C. With other companies
D. of the above
ANSWER A.

30 The association clause of a public company must be signed by:
A. 10 persons
B. 12 persons
C. 7 persons
D. 5 persons
ANSWER C

31. Quorum should be present at the
A. Commencement of meeting
B. Middle of the meeting
C. End of the meeting
D. Any time during meeting.
ANSWER D

32 Minutes should be recorded within ________ days from the date of conclusion of every meeting
A. 10
B. 20
C. 30
D. 40
ANSWER C

33 Directors are __________ of the company
A. Employees
B. Employers
C. Both a) & b)
D. None of the above
ANSWER A

34 Total managerial remuneration cannot exceed _____% of net profit
A. 11
B. 12
C. 13
D. 14
ANSWER A.
35. When a private company is converted into public company. In which form it should be
A. Schedule III
B. Schedule IV
C. Schedule VI
D. None of these
ANSWER C

36. The first directors are usually named in the …………
A. Articles
B. Memorandum
C. Prospectus
D. None
ANSWER A

37. __________ may appoint additional directors from time to time if so authorized by
articles.
A. Manager
B. Secretary
C. Promoters
D. Board of directors
ANSWER D

38. …………… is entitled to the management of the whole or substantially the whole of the
affairs of the company.
A. Manager
B. Secretary
C. Promoters
D. Board of directors
ANSWER A

39. ……… liability is imposed on the directors if they manipulate or falsify the accounts
of the company.
A. Civil
B. Criminal
C. Statutory
D. None
ANSWER B

40. Meeting cannot transact any business unless a…….. is present at every stage of the
meeting
A. Proxy
B. Manager
C. Quorum
D. Secretary
ANSWER C
41. Unless the articles provide for the retirement of all directors at every annual general meeting, at least ........of the total number of directors retire by rotation.
   A. 1/3  
   B. 2/3  
   C. 2/4  
   D. 1/2
   ANSWER A

42. Doctrine of indoor management is an exception to the principle of ........
   A. Rule of majority  
   B. Constructive notice  
   C. Public notice  
   D. Ultra vires
   ANSWER B

43. Article of Association can be altered by.
   A. A resolution of Board of Directors.  
   B. An ordinary resolution in Annual General Meeting by the shareholders.  
   C. A special Resolution.  
   D. Obtaining permission of the Company Law Tribunal.
   ANSWER C

44. A change in the registered office of the company from one state to another can be effected by.
   A. A resolution of the board of directors.  
   B. A resolution passed in the general meeting of the company.  
   C. A special resolution of the company and approval of the central Government.  
   D. A special resolution and confirmation of the Company Law Tribunal.
   ANSWER D

45. The charter of a company is its.
   A. Prospectus.  
   B. Memorandum of association.  
   C. Certificate of incorporation.  
   D. Articles of association.
   ANSWER B

II SHORT ANSWER TYPE QUESTIONS:

1. Define a joint stock company.
2. Define Private company.
3. What is an ‘Article of association’?
4. Discuss briefly various stages involved in formation of a company.
5. Who is a promoter? What are his functions?
6. “A certificate of incorporation is conclusive evidence that all the requirements of the companies act regarding registration of a company have been complied with”. Explain.

7. Write short note on “Reduction of Share Capital”.

8. What is the difference between MOA and AOA of a company?

9. Define prospectus and state its contents.

10. Prospectus is the face of the company. Do you agree?

11. Explain the legal requirements as to issue of a prospectus.

12. What is Red Herring Prospectus?


14. Explain the rules related to the remuneration of directors in a company.

15. What are the requisites of a Valid Meeting?

16. Write a short note on “allotment of shares in fictitious names”?

17. What is irregular allotment?

18. What is “Return of Allotment”?

19. What is meant by “Minimum Subscription”?

20. Write a note on statutory meeting.

21. What are the requisites of a Valid Meeting?

22. Under what circumstances do special resolutions become necessary?

23. Briefly explain the statutory duties of Directors of a company.

24. State the different types of Directors.

25. Who can apply to the Company Law Board for relief in case of oppression or mismanagement?

26. Explain the object clause of Memorandum of Association.

27. Write a note on “Association not for Profit”.


29. How are the auditors of a company appointed?

30. Write short note on ‘statutory meeting’.

31. Write short notes on: (June 2019)
   a. Prevention of Oppression and Mismanagement
   b. Requisites of a Valid Meeting
   c. Alteration of Articles of Association

32. “One person alone cannot hold a meeting” Explain

33. What is the role of an Independent Director in a company?

34. “Doctrine of Indoor Management protects the company from the outsiders”. Do you agree?

35. What are the exceptions to Doctrine of Indoor Management?

III **LONG ANSWER TYPE QUESTIONS:**

1. What is joint stock company? Distinguish between a public limited company and a private limited company.

2. Board of directors of private company decided to convert it into a public company. State the steps to be taken for such conversion in order to comply with the requirements under the Companies Act.

3. Enumerate the privileges available to a private company.
4. “A certificate of incorporation is a conclusive evidence that all the requirements of the Companies Act regarding registration of a company have been complied with”. Explain.
5. “The Memorandum of Associations is the charter of a company and defines the limitations on the powers of the company.”
6. Discuss the meaning, importance, and contents of Memorandum of Association.
7. Explain the law relating to alteration of objects clause in Memorandum of Association.
8. Explain the formalities involved in obtaining the Certificate of Incorporation. What are the consequences of such a certificate?
9. “Is it compulsory for every company to register Articles of Association?” Comment & discuss the restrictions on the alteration of Articles of Association.
10. Explain in detail the process of company’s formation.
12. Explain the meaning of “Shelf Prospectus”. State the law relating to Shelf Prospectus contained in Companies Act.
13. When is a public company entitled to proceed to allot its shares? What is an irregular allotment? What are the consequences of an irregular allotment?
14. Explain the provisions and main contents of “Return of Allotment” under the Companies Act.
15. What is meant by “Minimum Subscription”? State the provisions of the Companies Act, regarding the refund and deposit of minimum subscription.
16. What is share? What different classes of shares a Joint Stock Company may issue?
17. Explain the statutory provisions regarding the holding of an Annual General Meeting. What business is transacted at such a meeting?
18. “One person alone cannot hold a meeting” Explain.
19. Explain in detail the Types of meetings conducted by the companies. How are the MOM recorded?
20. How are the directors of a public company appointed? How are they removed. When is the office of a director of a public company deemed to be vacated? Discuss the qualifications of the directors.
21. Distinguish between:
   a. Managing Director and Whole-time director
   b. Manager and Managing Director
22. Explain the provisions of the Companies Act, regarding appointment of directors by the Board of Directors.
23. What are the modes in which a director of a company can be appointed.
24. Discuss the powers of the Company Law Tribunal to prevent oppression and mismanagement of a company.
25. “Majority will have its way but the minority must be allowed to have its say.” Discuss the above proposition with reference to prevention of oppression and mismanagement in a company.
26. Write short notes on the following:
   (a) Remuneration of Promoters,
   (b) Provisional Contracts,
   (c) Pre-incorporation Contracts
27. Discuss the provisions related to the appointment of Directors of a company and their role vis-à-vis the company and shareholders. (June 2018)

28. Explain the contents of Memorandum of Association (MOA) and its significance under the “doctrine of ultravires” (June 2018)

29. Write notes on: (June 2018)
   a. Prospectus
   b. Share Capital
   c. Statutory Meeting
   d. Preference Shares

30. Briefly discuss the provisions related to formation of one-person company under Companies Act, 2013.

31. What is a Memorandum of Association? What are its different clauses? How can its Liability Clause be altered? (June 2019)

32. Distinguish between:
   a. Managing Director and Whole-time director
   b. Manager and Managing Director

33. “Directors are trustees of company”. Comment and explain the powers and statutory duties of the Director.

34. “MOA is the charter and AOA are the byelaws of the company” Explain the significance of the two documents. Can the documents once framed be changed?

35. How can a one person company be formed?

UNIT - IV

I MULTIPLE CHOICE QUESTIONS:

1. The Negotiable Instruments Act, 1881 applies to
   A. The whole of India
   B. The whole of India except the State of Jammu and Kashmir
   C. Those states as notified by the Union Government from time to time in the Official Gazette
   ANSWER B

2. The Negotiable Instruments Act, 1881 came into force on
   A. 9th December 1881
   B. 19th December 1881
   C. 1st March, 1882
   D. none of the above.
   ANSWER C

3. The undertaking contained in a promissory note, to pay a certain sum of money is
   A. Conditional
B. Unconditional
C. May be conditional or unconditional depending upon the circumstances
D. None of the above.
ANSWER B

4. A bill of exchange contains a/an
A. Unconditional undertaking
B. Unconditional order
C. Conditional undertaking
D. Conditional order.
ANSWER B

5. Cheque is a
A. Promissory note
B. Bill of exchange
C. Both A. and (B) above
D. None of the above.
ANSWER C

6. The term 'negotiation' in section 14 of the Negotiable Instruments Act, 1881 refers to
A. The transfer of a bill of exchange, promissory note or cheque to any person, so as to constitute the person the holder thereof
B. The payment by a bank on a negotiable instrument after due verification of the instrument
C. The bargaining between the parties to a negotiable instrument
D. All of the above.
ANSWER A

7. If an instrument may be construed either as a promissory note or bill of exchange, it is
A. A valid instrument
B. An ambiguous instrument
C. A returnable instrument
D. None of the above.
ANSWER B

8. If in an instrument the amount undertaken or ordered to be paid is stated differently in figures and in words
A. The instrument is void due to uncertainty
B. The amount stated in figure shall be the amount undertaken or ordered to be paid
C. The amount stated in words shall be the amount undertaken or ordered to be paid
D. None of the above.
ANSWER A

9. Under section 16 of the Negotiable Instrument Act, 'indorsement in blank' of an instrument means
A. Where the indorser does not write anything on the instrument
B. Where the indorser signs his name only on the instrument
C. Where the indorser writes the name of the person who is directed to pay
D. None of the above.
**ANSWER B**

10. 'At sight' under section 21 of the Negotiable Instrument Act, 1881, means
A. On presentation
B. On demand
C. On coming into vision
D. None of the above.
**ANSWER A**

11. .............is an instrument in writing containing an unconditional undertaking, signed by the maker to pay a certain sum of money to, or to the order of, a certain person, or only to bearer of the instrument.
A. A Bank note
B. A currency note
C. A promissory note
D. Bills of Exchange
**ANSWER C**

12. In a promissory note, the amount of money payable
A. Must be certain
B. May be certain or uncertain
C. Is usually uncertain
D. None of the above.
**ANSWER A**

13. A bill is drawn payable to 'A' or order, 'A' indorses it to 'B', the indorsement not containing the words '"or order" or any equivalent words. Can 'B' negotiate the instrument?
A. Yes
B. No
C. Not always
D. None of the above.
**ANSWER A**

14. Can the holder of a negotiable instrument indorsed in blank convert the indorsement into an indorsement in full?
A. No, such a conversion is not possible under the Negotiable Instruments Act, 1881 (Section 49)
B. Yes, the holder can, without signing his own name, and by writing above the indorser's signature a direction to pay to any other person as indorsee, convert the indorsement in blank into an indorsement in full (Section 49)
C. Yes, the holder can by signing his own name and by writing above the indorser's signature a direction to pay to any other person as indorsee, convert the indorsement in blank to an indorsement in full (Section 49)
15. In determining reasonable time for the purpose of payment of a negotiable instrument
A. Public holidays are included
B. Public holidays are excluded
C. Only the holidays observed by the banks are excluded
D. None of the above.
ANSWER C

16. To whom of the following, payment of the amount due on a promissory note, bill of exchange or cheque must be made in order to discharge the maker or acceptor
A. Holder of the instrument
B. Indorser of the instrument
C. Indorsee of the instrument
D. None of the above.
ANSWER A

17. When a cheque bears across its face an addition of the name of a banker, either with or without the words not negotiable, the cheque is considered to have been crossed
A. Specially
B. Generally
C. Normally
D. Either a or b or c
ANSWER B

18. When an endorser willing to transfer to an endorsee only a part of the amount of the instrument, then it is which type of endorsement?
A. Restrictive endorsement
B. Conditional endorsement
C. Special endorsement
D. Partial endorsement
ANSWER

19. If a cheque is refused by the State Bank of India (SBI) due to inadequacy of funds for the cheque to clear, then it is said to be
A. Bounced cheque
B. Cancelled cheque
C. Either a or b
D. Both a and b
ANSWER A

20. If the words "not negotiable" are used with special crossing in a cheque, the cheque is
A. Not transferable
B. Transferable
C. Negotiable under certain circumstances
21. Crossing of a cheque effects the
A. Negotiability of the cheque
B. Mode of payment on the cheque
C. Both A. and (B)
D. None of the above
ANSWER C

22. Who among the following cannot cross a cheque?
A. Drawer
B. Holder
C. Banker
D. Foreigner
ANSWER B

23. An inland instrument is one which is……………
A. Drawn and made payable in India
B. Drawn in India upon some persons resident therein, even though it is made payable in a foreign country
C. Either (a) or (b)
D. None of above
ANSWER A

24. A protest is made by
A. The drawer
B. The indorser
C. A notary
D. None of the above
ANSWER C

25. Which of the following can NOT be considered as characteristics of Negotiable Instruments?
A. A holder do not gets the instrument free from all defects of title of any previous holder.
B. The instrument is transferable till maturity
C. They are freely transferable
D. All of above
ANSWER ______
D. None of the above.
ANSWER B

27. Acceptor for honour can be a party to
A. A cheque
B. A bill of exchange
C. A promissory note
D. A hundi
ANSWER B

28. Both noting and protest are compulsory in case of
A. Foreign Bills
B. Inland Bills
C. Foreign as well as Inland Bills
D. None of them
ANSWER C

29. Notice of dishonour must be given
A. To the drawer and drawee only
B. To the drawer, acceptor and endorser(s) only
C. To all the parties liable on the instrument or to their duly authorized agent
D. To all the parties who are secondarily liable on the instrument or to their duly authorized agent
ANSWER C

30. Presentation is required for
A. Acceptance
B. Sight
C. Payment
D. Any of the above three purposes
ANSWER C

31. A minor cannot be a _____________ of the instrument
A. Drawer
B. Drawee
C. Payee
D. Acceptor
ANSWER C

32. Presentment of an acceptance is required in case of
A. Every Bill of exchange
B. Every Bill of exchange payable after sight
C. Every promissory note
D. Every cheque
ANSWER C
33. In case of insolvency of a drawee, a bill should be presented for acceptance to the
   A. Official receiver
   B. Acceptor for honour
   C. Drawee incase of need
   ANSWER A

34. A drawee is need to be given a deliberation of
   A. 24 hrs
   B. 48 hrs
   C. 72hrs
   D. 10 days
   ANSWER B

35. The person on whom the bill is drawn is known as
   A. Drawee
   B. Drawer
   C. Payee
   D. Endorser
   ANSWER B

36. When the holder endorses the bill to anyone else he becomes the
   A. Endorsee
   B. Drawer
   C. Payee
   D. Endorser
   ANSWER D

37. _______________is the person to whom the bill is endorsed.
   A. Endorsee
   B. Drawer
   C. Payee
   D. Endorser
   ANSWER A

38. A bill of exchange must contain an unconditional order to pay _____________only.
   A. Money
   B. Goods
   C. Property
   D. Assets
   ANSWER A

39. Kavita draws a bill on Shyam for Rs 30,000. Kavita endorsed it to Ram. Ram endorsed it
to Rahim. The payee of the bill will be
   A. Ram
   B. Kavita
40. A bill drawn and accepted for a genuine trade transaction is termed as a
   A. Foreign Bill
   B. Accommodation Bill
   C. Trade bill
   D. Account sale
   ANSWER C

41. ______________ is a bill in which a person lends or gives his name to oblige a friend or some person whom he knows or otherwise.
   A. Foreign Bill
   B. Accommodation Bill
   C. Trade bill
   D. Account sale
   ANSWER B

42. A bill which is drawn, accepted or endorsed ______________ is called an accommodation bill.
   A. With consideration
   B. Without consideration
   C. (a) or (b)
   ANSWER B

43. A cheque is a bill of exchange
   A. Which is always drawn on a banker
   B. Which is always payable on demand
   C. (a) or (b)
   D. (a) and (b)
   ANSWER D

44. ______________ cannot be paid across the counter but must be collected through a banker.
   A. A crossed cheque
   B. An open cheque
   C. (a) or (b)
   D. (a) and (b)
   ANSWER A

45. In a bill of exchange, the amount of money payable
   A. Must be certain
   B. May be certain or uncertain
   C. Is usually uncertain
   D. None of the above.
   ANSWER A
II SHORT ANSWER TYPE QUESTIONS:

1. Enumerate the essential characteristics of negotiable instruments.
2. Define holder, enumerate the privileges of a holder in due course.
3. Illustrate the meaning of full endorsement.
4. Differentiate between Negotiation and Assignment.
5. What do you mean by maturity of a negotiable instrument?
6. Define Promissory notes. What are essentials? What is difference from B/E?
7. What is cheque?
8. Dishonoured cheque is not to be treated as an offence. Comment.
9. Distinguish between “dishonour by non-acceptance” and dishonour by non-payment”.
10. What are the consequences of dishonour of a cheque?
11. Discuss the significance of “Crossing of Cheque”?
12. When must the banker refuse payment of a cheque?
13. Write short note on “Forged endorsement”.
14. What is the effect of cancellation of endorsement by the holder?
15. Define opening of a crossed cheque.
17. Distinguish between Account Payee Crossing and Not Negotiable Crossing.
18. Describe Not Negotiable Crossing.
19. What is negotiations?
20. What is meant by “Negotiation back”?
21. State different kinds of endorsement.
22. Who is an acceptor for honour?
23. What do you mean by “payment in due course”?
24. What do you understand by acceptance of a bill of exchange?
25. Who are the persons who can accept a bill of exchange?
26. Write a short note on Time and Place for Presentment of Negotiable Instrument
27. Write a note on Noting and protesting in case of Dishonour of Negotiable Instrument
28. Explain ‘presentment for sight’.
29. When is notice of dishonour not necessary under the Negotiable Instruments Act, 1881?
30. What is meant by noting? What are its contents?
31. Briefly discuss various types of Crossing of Cheques (June 2018)
32. Differentiate between Trade Bill and Accommodation Bill
33. How is Crossing of Cheque different from Bouncing of Cheque
34. Maker and Payee of a Negotiable Instrument can be the same. Explain.
35. How is Inland Bill different from Foreign Bill? What are Bill-in Sets?

III LONG ANSWER TYPE QUESTIONS:

1. What do you understand by ‘Negotiable Instrument”? What are its essential characteristics? Mention the presumptions made in respect of a negotiable instrument?
2. Define a Bill of Exchange. How does it differ from a Promissory Note, a cheque and a Demand Draft? Can a cheque be accepted like a Bill of Exchange?
3. What is a “Promissory Note” and what are its elements? Can maker of a promissory note himself be the payee?

4. Explain the meaning of Crossing of cheque. Discuss its types in detail.

5. Define ‘Holder in due course’ and privileges available to him.

6. What is meant by maturity of a Bill of Exchange or Promissory Note? Calculate the date of maturity of the following bills of exchange explaining the relevant rules relating to determination of the date of maturity as provided in the Negotiable Instruments Act, 1881:
   (i) A Bill of Exchange dated 31st August 2007 is made payable three months after date.
   (ii) A Bill of Exchange drawn on 15th October 2007 is payable twenty days after sight and the bill is presented for acceptance on 31st October 2007.

7. Point out the difference between a “Cheque” and a “Bill of Exchange” under the Negotiable Instruments Act, 1881.

8. “Every holder-in due course is a holder, but every holder may not be a holder-in due course.” Examine.

9. Who are the important parties to a negotiable instrument? What do you know of their capacities to make, draw, accept, indorse or negotiate such instruments?

10. Explain and illustrate different kinds of endorsement.

11. What is meant by “noting”? What are its contents?

12. When is a cheque said to be crossed? Distinguish between general crossing and special crossing.

13. Explain “Payment of crossed cheque cannot be collected across the counter.”

14. Discuss the rules regarding negotiation of a lost instrument, an instrument obtained for an unlawful consideration and an overdue instrument.

15. Once a bearer instrument, always a bearer instrument.” Comment.

16. What is negotiation? State the difference between negotiation and assignment.

17. “A partial indorsement does not operate as a negotiation of the instrument.” Comment. Explain and illustrate the various classes of indorsements.

18. Can the defence that one of the indorsements is forged be raised against a “holder un due course” by A. the acceptor or (B) an indorser?

19. Explain the liability of an indorser.

20. Under the Negotiable Instrument Act, explain the rights and obligations of a person:
   (i) Who is a finder of a lost instrument by unlawful?
   (ii) Who has obtained an instrument by unlawful means or unlawful consideration.

21. Explain:
   (i) Conditional endorsement on negotiable instrument is invalid.
   (ii) What do you mean by negotiation and assignment.

22. What is an endorsement in relation to a bill of exchange? Explain the various types of such endorsements.

23. “A cheque marked “not negotiable” is nevertheless negotiable.” Comment.

24. “The banker is liable for wrongful dishonour of a cheque to the drawer only and not to the payee”. Comment.

25. Explain as to why shall the combination of “not negotiable” with “Account payee” crossing be considered as the safest form of crossing a cheque.

26. What is a bill of exchange? What are its essential elements? How does it differ from promissory note? (June 2014)
27. Discuss the responsibilities and the liabilities of bankers in matters related to bouncing of cheques (June 2016)
28. The right of a holder in due course are superior to the rights of a holder. Elucidate. (June 2018)
29. Explain different types of Negotiable Instruments and discuss the characteristics of each type of negotiable instrument. (June 2018)
30. What is meant by 'dishonour' of a negotiable instrument? State the penalty for dishonour of a cheque for insufficiency of funds to the credit of the account of the drawer.
31. What is a Negotiable Instrument? What are its essential characteristics? What are the legally permitted assumptions in respect of a Negotiable Instrument (June 2019)
32. Distinguish between: (June 2019)
   a. A bill of Exchange and a Promissory Note
   b. Negotiation and Assignment
   c. Ambiguous and Inchoate Instrument
33. In what way ‘Discharge of a Party’ to a negotiable instrument differs from the ‘Discharge of Instrument’. Explain the different modes of discharge of a negotiable instrument under the Negotiable Instruments Act, 1881.
34. What are the liabilities of banker as a collecting and paying banker?
35. What is Bouncing of Cheque? What are the reasons and consequences of a Bouncing of cheque
UNIT - I

I   MULTIPLE CHOICE QUESTIONS:

1. National income is computed --------year.
   A. Every
   B. Every two years
   C. Every five years
   D. Every four years
   ANSWER: A

2. The money value of -----------goods is not included in the estimation of national income.
   A. Intermediate
   B. Capital
   C. Final
   D. Consumer
   ANSWER: A

3. There are methods of measuring national income:
   A. 5
   B. 2
   C. 1
   D. 3
   ANSWER: D

4. If we compare GDP and GNP, then:
   A. GNP = GDP – Net Income from Abroad
   B. GNP = GDP + Net Income from Abroad
   C. GNP = NNP – Net Income from Abroad
   D. GNP = NNP + Net Income from Abroad
   ANSWER: B

5. It is deducted from GNP to get NNP:
   A. Indirect Taxes
   B. Depreciation
   C. Direct Taxes
   D. Transfer Payments
   ANSWER: B

6. It is added to GDP to get GNP:
   A. Depreciation Allowance
   B. Direct Taxes
C. Subsidies
D. Net Income from abroad

ANSWER: D

7. Select the correct statement:
A. Transfer Payments are included in National Income
B. Depreciation Allowance is a part of GNP
C. Taxes are not included in NNP
D. GDP means Gross Direct Production

ANSWER: B

8. Which is the largest figure:
A. NNP
B. GNP
C. DPI
D. PI

ANSWER: B

9. A TV set purchased from a retail store is an example of::
A. Intermediate Good
B. Capital Good
C. Surplus Good
D. Final Good

ANSWER: D

10. Undistributed profits are considered:
A. Income earned but not received
B. Income earned but not received
C. Income earned and received
D. None of the above

ANSWER: A

11. Total value of all final goods and services produced in a country during one year is:
A. NNP
B. GNP
C. GDP
D. NI

ANSWER: C

12. Personal Income includes:
A. Direct Taxes
B. Indirect Taxes
C. Depreciation
D. None of these

ANSWER: A
13. Personal income includes:
   A. Transfer Payments
   B. Indirect taxes
   C. Depreciation
   D. All of the above
   ANSWER: A

14. If savings exceed investment then:
   A. National income rises
   B. National Income falls
   C. National Income is not affected
   D. None of the above
   ANSWER: B

15. If we include it national income will be overestimated:
   A. Transfer Payment
   B. Income from Abroad
   C. Illegal Income
   D. Exports
   ANSWER:

16. It is avoided to make correct estimate of national income:
   A. Free Services
   B. Double Counting
   C. Export Earnings
   D. All of the above
   ANSWER: B

17. It is not included in estimation of national income:
   A. Illegal Income
   B. Services of house wife
   C. Imports
   D. All are not included
   ANSWER: D

18. Circular flow of income links:
   A. Income, expenditure
   B. Exports, Imports
   C. Govt. Taxes, Govt. Expenditure
   D. Saving and Investment
   ANSWER: A

19. This statement is true:
   A. NI = Rent + Interest + Wages + Profit
   B. NI = Rent + Interest + Wages + Taxes
   C. NI = Govt. Expenditure + Interest + Wages + profit
   ANSWER:
D. \[ NI = \text{Rent} + \text{Interest} + \text{Wages} + \text{Pensions} \]
ANSWER: A

20. National Income is estimated by:
   A. Product, Import and Export Methods
   B. Product, Income and Consumption Methods
   C. Product, Income and Market Methods
   D. Product, Income and Expenditure Methods
ANSWER: D

21. GDP stands for:
   A. Great Domestic progress
   B. Grand Development Plan
   C. Gross Domestic Product
   D. Gross Domestic Plan
ANSWER: C

22. Which of the following would not be included in GNP:
   A. Government Support to the very poor
   B. Government purchase of an airplane
   C. Payment for construction of highway
   D. The salary paid for the President’s Secretary
ANSWER: A

23. Imputed rent of occupied house is always included in National income.
   A. True
   B. False
ANSWER: A

24. Financial help received by Flood victims is a part of National income.
   A. True
   B. False
ANSWER: B

25. The circular flow of income in all the four sector economy includes financial sector as well.
   A. True
   B. False
ANSWER: A

26. Gross National Product equals:
   A. Net National Product adjusted for inflation
   B. Gross Domestic Product adjusted for inflation
   C. Gross Domestic Product plus net property income from abroad
   D. Net National Product plus net property income from abroad
ANSWER: C
27. Net National Product equals:
   A. Gross National Product adjusted for inflation
   B. Gross Domestic Product adjusted for inflation
   C. Gross Domestic Product plus net property income from abroad
   D. Gross National Product minus depreciation
   ANSWER: D

28. The standard of living is often measured by:
   A. Real GDP per capita
   B. Real GDP
   C. Real GDP * population
   D. Real GDP plus depreciation
   ANSWER: A

29. Real national income measures:
   A. Nominal national income adjusted for population change
   B. Nominal national income adjusted for unemployment
   C. Nominal national income adjusted for inflation
   D. Nominal national income adjusted for exchange rates
   ANSWER: C

30. Which of the following statements is true about the circular flow?
   A. Output is greater than income
   B. Income is more than expenditure
   C. Output is less than expenditure
   D. Output equals income equals expenditure
   ANSWER: D

31. GDP measures:
   A. A country's income
   B. A country's wealth
   C. Consumer spending
   D. Net trade income
   ANSWER: A

32. To adjust GDP from market prices to factor cost:
   A. Add indirect taxes
   B. Subtract subsidies
   C. Deduct indirect taxes and deduct subsidies
   D. Deduct indirect taxes and add subsidies
   ANSWER: C

33. To adjust from Net National Product to Gross National Product:
   A. Add depreciation
   B. Deduct indirect taxes
C. Add subsidies
D. Add inflation
ANSWER: A

34. The Gini coefficient measures:
A. Income inequality
B. Inflation
C. Unemployment
D. Economic growth
ANSWER: A

35. A higher GDP per capita may not mean that the quality of life has really improved because:
A. It measures wealth not income
B. It measures Gross Domestic Product
C. It does not measure the quality of the items produced
D. It is only measured every five years
ANSWER: C

36. Which of the following is least likely to be a feature of a market economy?
A. Production and consumption is guided by an overall master plan.
B. Resources and firms are in private ownership.
C. Decisions on resource allocation are taken through a system of markets and prices.
D. The consumer is sovereign.
ANSWER: A

37. Under the CFI model, the flow of income will increase if:
A. total leakages exceed total injections.
B. total leakages plus total injections equals zero.
C. total leakages and total injections correspond.
D. total injections exceed total leakages.
ANSWER: D

38. Which of the following is not an injection into the circular flow of income?
A. Spending on exports.
B. Spending on imports.
C. Spending by government on public goods and services.
D. Spending by firms on investment.
ANSWER: B

39. With regard to inflation, which of the following statements will always be true?
A. Workers will always be worse off.
B. Price rises will always outstrip wage rises.
C. The value of money will always be falling.
D. Interest rates will always be ahead of the rate of inflation.
ANSWER: C
40. To slow down the rate of growth in the economy a government should:
   A. relax controls on credit creation by the banks.
   B. run a budget deficit.
   C. increase interest rates.
   D. increase government spending.
   ANSWER: C

41. ‘De-industrialisation’ normally refers to:
   A. nationalisation of a country’s industry.
   B. The economies of smaller states.
   C. The spread of industry to rural areas.
   D. The decline in a country’s manufacturing base.
   ANSWER: D

42. Unemployment resulting from a deficiency in the demand for goods produced by a particular industry or sector is known as:
   A. cyclical unemployment.
   B. technological unemployment.
   C. structural unemployment.
   D. frictional unemployment.
   ANSWER: C

43. Which of the following is not regarded as part of fiscal policy?
   A. Increased taxation.
   B. Increased government expenditure.
   C. Increased wage controls.
   D. Decreased taxation.
   ANSWER: C

44. If interest rates are 5% and inflation is 2%, then the ‘real’ rate of interest will be:
   A. 7%
   B. 3%
   C. 2.5%
   D. 10%
   ANSWER: B

45. Indirect taxes are taxes on:
   A. company profits.
   B. personal wealth.
   C. spending.
   D. income.
   ANSWER: C

II SHORT ANSWER TYPE QUESTIONS:

1. What do you mean by Macro Economics?
2. Explain the two sector model of circular flow of income in an economy.
3. Why are intermediate goods not included in GNP?
4. Explain two sector circular flow of income in an economy.
5. Write short note on product market and money market.
7. Write a note on circular flow of income.
8. Distinguish between real and nominal gross domestic product.
9. Explain the basis of classifying goods into intermediate and final goods. Give suitable examples.
10. Distinguish between consumer goods and capital goods. Which of these are final goods?
11. Explain how distribution of G.D.P. is its limitation as a measure of economic welfare.
12. Explain the meaning of “Domestic Territory of a country”.
13. Distinguish between ‘factor income’ and ‘transfer income’.
14. Why do we include the imputed value of goods but not services while estimating production for self-consumption?
15. Define operating surplus, write its components.
16. Distinguish between domestic product and national product.
17. When can domestic product be more than National Product.
18. What do you mean by net export?
20. Who is considered as normal resident of a country.
21. What do you mean by economic territory?
22. When will be NDP<sub>MF</sub> be less than NDP<sub>FC</sub>?
23. State the meaning of consumption of fixed capital?
24. State the meaning of injection in income flow, with the help of an example.
25. What do you mean by leakage in income flow?
26. Define ‘Nominal GNP’.
27. What do you mean by ‘Real GNP’?
28. What is the difference between intermediate goods & final goods and services?
29. Why are the imports subtracted when GDP is calculated in expenditure approach?
30. Define GDP deflator as a measure of inflation.
31. What are the principal difference between government purchases of goods & service and transfer payments?
32. Define production as an income generating activity.
33. Why the national income is measured at factor prices and not at market prices?
34. Why do the economists use real GDP rather than nominal GDP to gauge economic well-being?
35. Why do you think households’ purchase of new housing is included in the investment components of GDP rather than the consumption component?

II LONG ANSWER TYPE QUESTIONS:

1. What do you understand by Macro Economics? How is it different from Micro economics?
2. What do you understand by the concept of National Income? Discuss the significance of the estimates of National Income?
3. Explain the circular flow of income in all the four sector economy. Draw a relationship between leakages and injections in circular flow.


5. What is the role of consumption function and investment function in National Income determination? Support your answer by diagram and citing some practical examples.

6. Discuss the meaning and scope of Macro-economics. Discuss the significance of macro-economic variables in business decision making.

7. How is the equilibrium level of national income determined? Show that both the aggregate demand-aggregate supply approach and Saving - Investment approach give the same level of equilibrium income.

8. What is Macro Economics? Discuss its importance. Explain the three and four sector model of economy.


10. How will you treat the following while estimating national income of India.
    (a) Dividend received by an Indian from his investment in shares of a foreign company.
    (b) Money received by a family in India from relatives working abroad.
    (c) Interest received on loan given to a friend for purchasing a car.

11. How will you treat the following while estimating national income of India? Give reason for your answer?
    (a) Dividend received by a foreigner from investment in shares of an Indian Company.
    (b) Money received by a family in India from relatives working abroad.
    (c) Interest received on loan given to a Friend for purchasing a car.

12. Explain the problem of double counting in estimating national income, with the help of an example. Also explain two alternative ways of avoiding the problem.


14. How will you treat the following in estimating national income of India? Give reasons for your answer.
    (a) Value of bonus shares received by share-holders of a company.
    (b) Fees received from students.
    (c) Interest received on loan given to a foreign company in India.

15. Explain the steps of measuring national income by income method.


17. Giving reasons, categories following into transfer payment or factor payments:
    (a) Financial help gives to flood victims
    (b) Old age pension.
    (c) Imputed rent.

18. How will you treat the following while estimating national income. Give reasons for your answer.
    (i) Capital gain on sale of house.
(ii) Prize won is lottery.
(iii) Interest on public debt.

19. While estimating national income. How will you treat the following. Give reason for your answer.
(i) Imputed rent of occupied house.
(ii) Interest received on debentures.
(iii) Financial help received by Flood victims.

20. From the following data, calculate national income by (a) Income method (b) expenditure method.

<table>
<thead>
<tr>
<th>Items</th>
<th>Rs. (Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>150</td>
</tr>
<tr>
<td>Rent</td>
<td>250</td>
</tr>
<tr>
<td>Govt. Final Consumption Expenditure</td>
<td>600</td>
</tr>
<tr>
<td>Pvt. Final Consumption Expenditure</td>
<td>1200</td>
</tr>
<tr>
<td>Profits</td>
<td>640</td>
</tr>
<tr>
<td>Compensation of Employees</td>
<td>1000</td>
</tr>
<tr>
<td>NFIA</td>
<td>30</td>
</tr>
<tr>
<td>Net Exports</td>
<td>(-) 40</td>
</tr>
<tr>
<td>Net Indirect Tax</td>
<td>60</td>
</tr>
<tr>
<td>Consumption of Fixed Capital</td>
<td>50</td>
</tr>
<tr>
<td>Net Domestic Capital Formation</td>
<td>340</td>
</tr>
</tbody>
</table>

21. From the following data calculate GNP at FC by (a) Income method (b) Expenditure method.

<table>
<thead>
<tr>
<th>Items</th>
<th>Rs. (Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net domestic capital formation</td>
<td>500</td>
</tr>
<tr>
<td>Compensation of employees</td>
<td>1,850</td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td>100</td>
</tr>
<tr>
<td>Govt. final consumption expenditure</td>
<td>1100</td>
</tr>
<tr>
<td>PVT. final consumption expenditure</td>
<td>2600</td>
</tr>
<tr>
<td>Rent</td>
<td>400</td>
</tr>
<tr>
<td>Dividend</td>
<td>200</td>
</tr>
<tr>
<td>Interest</td>
<td>500</td>
</tr>
<tr>
<td>Net Exports</td>
<td>(-) 100</td>
</tr>
<tr>
<td>Profits</td>
<td>1100</td>
</tr>
<tr>
<td>NFIA</td>
<td>(-) 50</td>
</tr>
<tr>
<td>Net Indirect Taxes</td>
<td>250</td>
</tr>
</tbody>
</table>

22. Calculate net value added at factor cost of a firm:

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>(Rs. IN LAKHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Sale</td>
<td>140</td>
</tr>
<tr>
<td>ii. Change in stock</td>
<td>(-)10</td>
</tr>
<tr>
<td>iii. Depreciation</td>
<td>20</td>
</tr>
</tbody>
</table>
iv. Export &nbsp;&nbsp;&nbsp; 7
v. Intermediate cost &nbsp;&nbsp;&nbsp; 90
vi. Subsidies &nbsp;&nbsp;&nbsp; 5
vii. Import of raw material &nbsp;&nbsp;&nbsp; 3

23. Calculate net value added at market price of a firm: -

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>(Rs. IN LAKHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Sale in domestic market.</td>
<td>250</td>
</tr>
<tr>
<td>ii. Opening stock.</td>
<td>20</td>
</tr>
<tr>
<td>ii. Closing in stock</td>
<td>50</td>
</tr>
<tr>
<td>iii. Depreciation</td>
<td>15</td>
</tr>
<tr>
<td>iv. Net in direct taxes</td>
<td>25</td>
</tr>
<tr>
<td>v. Intermediate cost</td>
<td>200</td>
</tr>
<tr>
<td>vi. Export</td>
<td>10</td>
</tr>
</tbody>
</table>

24. Calculate 'net value added at factor cost' from the following data: -

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>(Rs. IN LAKHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Sale</td>
<td>700</td>
</tr>
<tr>
<td>ii. Purchase of machine for installation in the factory</td>
<td>100</td>
</tr>
<tr>
<td>iii. Subsidies</td>
<td>50</td>
</tr>
<tr>
<td>iv. Change in stock.</td>
<td>(-) 30</td>
</tr>
<tr>
<td>v. Purchase of raw material</td>
<td>400</td>
</tr>
<tr>
<td>vi. rent</td>
<td>60</td>
</tr>
<tr>
<td>vii. Consumption of fixed capital</td>
<td>20</td>
</tr>
</tbody>
</table>

25. Calculate 'net value added at factor cost' from the following data: -

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>(Rs. IN LAKHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Sale</td>
<td>800</td>
</tr>
<tr>
<td>ii. import of material.</td>
<td>500</td>
</tr>
<tr>
<td>iii. Subsidies</td>
<td>50</td>
</tr>
<tr>
<td>iv. Change in stock.</td>
<td>40</td>
</tr>
<tr>
<td>v. Purchase of raw material from domestic market.</td>
<td>450</td>
</tr>
<tr>
<td>vi. Wages and salaries</td>
<td>200</td>
</tr>
<tr>
<td>vii. Consumption of fixed capital</td>
<td>60</td>
</tr>
</tbody>
</table>

26. Calculate Gross value added at factor cost of a firm: -

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>(Rs. IN LAKHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Value of output</td>
<td>300</td>
</tr>
<tr>
<td>ii. Change in stock</td>
<td>30</td>
</tr>
<tr>
<td>iii. Depreciation</td>
<td>20</td>
</tr>
<tr>
<td>iv. Net in direct taxes</td>
<td>30</td>
</tr>
<tr>
<td>v. Intermediate cost</td>
<td>200</td>
</tr>
<tr>
<td>vi. Export</td>
<td>15</td>
</tr>
</tbody>
</table>
27. What is the difference between GDP & GNP? Which one is the better measure of income? Why?
29. Discuss critically GDP as a measure of economic welfare.
30. Explain why we can not calculate the national product simply by adding up the production of all firms.
31. Why do the economists use real GDP rather than nominal GDP to gauge economic well-being? Explain the significance.
32. How each of the following events is likely to affect GDP?
   a) Environmental laws prohibit the firms from emitting pollution
   b) Strikes by trade unions.
   c) Discovery of new seed increases farm harvest.
33. Define private saving. How is the private saving used in the economy? What is the relationship between private saving & national saving.
34. Derive saving-investment identify in the context of an open economy.
35. From national income accounting show that an increase in taxes (while transfer unchanged) must imply a change in net exports, government purchases or the saving investment balance.

UNIT - II

I MULTIPLE CHOICE QUESTIONS:

1. When marginal propensity to consume is zero, the value of investment multiplier will also be---------.
   A. Zero
   B. One
   C. Five
   D. Three
   ANSWER: A

2. The "actual" value of the variables like consumption, investment, output, etc, is known as:
   A. ex post measures
   B. ex ante measures
   C. ex pre-measures
   D. none of the above
   ANSWER: B

3. What is "mps"or the 'marginal propensity to save'?
   A. the proportion of total additional planned savings to total additional income
   B. the proportion of total additional income to total additional planned savings
   C. the fraction of total additional income that is used for consumption
   D. none of the above.
4. What is "mpc" or the 'marginal propensity to consume'?
A. the proportion of total additional planned savings to total additional income
B. the proportion of total additional income to total additional planned savings
C. the fraction of total additional income that is used for consumption
D. none of the above
ANSWER: C

5. Which of the following statements is correct?
A. Real GDP is the total market value of the final goods and services produced in America for sale in a year valued in the prices of 1992.
B. Your buying stock in the stock market is an example of investment spending
C. Potential Real GDP is always greater than Equilibrium Real GDP
D. Social security and welfare are examples of spending on infrastructure.
ANSWER: A

6. The period of the business cycle in which real GDP is increasing is called the:
A. expansion
B. peak
C. recession
D. trough
ANSWER: A

7. Assume that, in the population, 95 million people worked for pay last week, 5 million people did not work for pay but had been seeking a job, 5 million people did not work for pay and had not been seeking a job for the past several months, and 45 million were under age 16. The unemployment rate, given these numbers, is:
A. 5%
B. 8%
C. 10%
D. 20%
ANSWER: A

8. A type of unemployment in which workers are in-between jobs or are searching for new and better jobs is called ______ unemployment:
A. frictional
B. cyclical
C. structural
D. turnover
ANSWER: A

9. Which of the following would cause the aggregate demand curve to shift to the right?
A. an increase in purchases by the federal government
B. an increase in real interest rates
C. an appreciation of the American dollar
D. a decrease in the money supply
ANSWER: B

10. Assume that net exports increase by $1 billion. Equilibrium Real GDP will rise by more than $1 billion. Explain why. (i.e., why is there a multiplier?).
A. an increase in net exports appreciates the dollar causing a further increase in net exports
B. an increase in net exports causes an increase in tax revenues which increases
government spending
C. an increase in net exports increases income causing an increase in induced consumption
ANSWER: C

11. An increase in the money supply causes:
A. interest rates to fall, investment spending to rise, and aggregate demand to rise
B. interest rates to rise, investment spending to rise, and aggregate demand to rise
C. interest rates to rise, investment spending to fall, and aggregate demand to fall
D. interest rates to fall, investment spending to fall, and aggregate demand to fall
ANSWER: A

12. The demand for money will fall if:
A. Real GDP rises
B. real interest rates rise
C. the GDP Deflator rises
D. people expect deflation soon
ANSWER: B

13. If the actual unemployment rate is below the natural rate of unemployment, it would be expected that:
A. the rate of inflation would increase
B. wages would fall
C. the Phillips curve would shift to the left
D. the natural rate of unemployment would fall
ANSWER: A

14. According to the monetarist acceleration theory, in the long-run,
A. the actual unemployment rate will be below the natural rate of unemployment
B. the actual unemployment rate will be equal to the natural rate of unemployment
C. the actual inflation rate will be equal to the natural inflation rate
D. the budget deficit will be equal to zero
ANSWER: A

15. The aggregate demand curve _____ a market demand curve _____ it _____ the sum of all market demand curves in the economy.
A. is not; and; is not
B. is; and; is
C. is; but; is not
D. is not; but; is
ANSWER: A

16. Which of the following factors will shift the aggregate supply curve to the left?
A. supply of better educated labor
B. late monsoon rains in an agricultural nation like India
C. investment in infrastructure
D. good weather
ANSWER: A

17. An increase in money supply will cause
A. a rightward shift in the AD curve
B. a leftward shift in the AS curve
C. a rightward shift in the AS curve
D. a leftward shift in the AS curve
ANSWER: A

18. When an economy produces at its ___ level of output, the aggregate supply curve becomes
A. maximum; horizontal
B. maximum; vertical
C. minimum; vertical
D. minimum; relatively flat and negatively sloped
ANSWER: B

19. One possible explanation for involuntary unemployment is
A. the wage rate does not adjust immediately to changes in the labor demand
B. the labor market is perfectly competitive
C. the firms, knowing the supply and demand curve for labor, implement the equilibrium
D. wage, which happens to be so low that many people prefer to stay at home
ANSWER: A

20. If inflationary expectations _____, the results will be a(n) ______ in the rate of inflation even though the unemployment rate _____ have changed
A. increase; decrease; may not
B. increase; decrease; may
C. decrease; increase; may not
D. decrease; decrease; may not
ANSWER: D

21. The value of marginal propensity to save can never be---------.
A. Negative
B. Positive
AUTONOMOUS INVESTMENT IS THE INVESTMENT THAT HAS NO EFFECT OF INCOME OR RATE OF INVESTMENT.
A. True  
B. False  
ANSWER: A

INDUCED INVESTMENT IS THE INVESTMENT THAT HAS NO EFFECT OF INCOME OR RATE OF INVESTMENT.
A. True  
B. False  
ANSWER: B

MARGINAL EFFICIENCY OF INVESTMENT INDICATE THE RATE OF RETURN.
A. True  
B. False  
ANSWER: A

THE SUM TOTAL OF MPC AND MPS IS ALWAYS LESS THAN ONE.
A. True  
B. False  
ANSWER: B

AN INCREASE IN INVESTMENT IS MOST LIKELY TO BE CAUSED BY:
A. Lower interest rates  
B. Expectations of lower national income  
C. A decrease in the marginal propensity to consume  
D. An increase in withdrawals  
ANSWER: A

AN OUTWARD SHIFT IN THE MARGINAL EFFICIENCY OF CAPITAL SHOULD:
A. Decrease consumption  
B. Increase aggregate demand  
C. Reduce aggregate supply  
D. Slow economic growth  
ANSWER: B

AN INCREASE IN INTEREST RATES:
A. Is likely to reduce savings  
B. Is likely to reduce the external value of the currency  
C. Leads to a shift in the MEC schedule  
D. Leads to a movement along the MEC schedule  
ANSWER: D

THE ACCELERATOR ASSUMES:
A. The marginal propensity to consume is constant
B. The economy is at full employment 
C. There is a constant relationship between net investment and the rate of change of output 
D. The multiplier is constant 
ANSWER: C

30. Investment depends mainly on: 
A. Past levels of income 
B. Future expected profits 
C. Present national income levels 
D. Historic data 
ANSWER: B

31. A profit-maximizing firm will invest up to the level of investment where: 
A. The cost of borrowing equals the marginal efficiency of capital 
B. The cost of borrowing is greater than the marginal efficiency of capital 
C. The cost of borrowing is less than the marginal efficiency of capital 
D. The cost of borrowing equals the marginal propensity to consume 
ANSWER: A

32. Investment is: 
A. An injection that increases aggregate demand 
B. A withdrawal that increases aggregate demand 
C. An injection that decreases aggregate demand 
D. A withdrawal that decreases aggregate demand 
ANSWER: A

33. Investment is an unstable element of aggregate demand because is depends heavily on: 
A. Government policy 
B. Expectations 
C. National income 
D. Historic trends 
ANSWER: B

34. If an increase in investment leads to a bigger increase in national income this is called the: 
A. Accelerator 
B. Aggregate demand 
C. Monetarism 
D. Multiplier 
ANSWER: D

35. The difference between gross investment and net investment is: 
A. Depreciation 
B. Acceleration 
C. Deceleration
D. Capital investment

ANSWER: A

36. Which three of the following are accurate descriptions of investment expenditure in the UK?
   a) Investment is a flow concept, as it involves a rate of change
   b) Investment is a stock concept, as it refers to a total value of capital
   c) Investment contributes about 13% of UK aggregate demand
   d) Investment contributes to both demand and supply aspects of the economy; in the latter case influencing real output per unit of factor input
   A. a), c) and d) 
   B. a), d) and b) 
   C. b), d) and c) 
   D. b), c) and a) 
   ANSWER: A

37. Which two of the following are likely to increase investment expenditure?
   a) A rise in the rate of interest
   b) A fall in the rate of interest
   c) More favourable business expectations and less uncertainty
   d) Less favourable business expectations and more uncertainty
   A. d) and e)
   B. b) and d)
   C. b) and c)
   D. a) and c)
   ANSWER: C

38. Which two of the following are likely to reduce investment expenditure?
   a) Lower initial capital outlays on projects
   b) A rise in the rate of interest
   c) A fall in the rate of interest
   d) More favourable business expectations and less uncertainty
   e) Less favourable business expectations and more uncertainty
   A. b) and e)
   B. b) and d)
   C. a) and e)
   D. a) and c)
   ANSWER: A

39. Which two of the following would shift the ‘Marginal Efficiency of Investment’ (MEI) schedule to the right?
   a) A fall in expected annual returns on projects
   b) A rise in expected annual returns on projects
   c) A rise in the supply price of projects
   d) A fall in the supply price of projects
40. Which two of the following are characteristic of the ‘Accelerator Theory’ of investment?
   a) Relates gross investment to total output in a given year
   b) Relates net investment to the rate of change of output
   c) Relates net investment to total output in a given year
   d) Involves a constant capital/output ratio to be applied when output rises above the full capacity level
   e) Involves a variable capital/output ratio to be applied when output rises below the full capacity level

   A. c) and e)  
   B. b) and d)  
   C. c) and d)  
   D. a) and d)  
   ANSWER: B

41. For the following five questions, match each description to the appropriate theory of investment.

   The suggestion that the growth of output beyond ‘full capacity’ can have a quantifiable impact on net investment.
   A. Capital Stock Adjustment Model  
   B. Marginal Efficiency of Investment (MEI)  
   C. Accelerator Theory  
   D. ‘Stop-go’ Public Policies  
   ANSWER: C

42. Gross investment is seen as depending on last year’s level of output and last year’s capital stock.
   A. Levels of Profitability  
   B. Marginal Efficiency of Investment (MEI)  
   C. Capital Stock Adjustment Model  
   D. Nature of the Financial System  
   ANSWER: C

43. Identifies the rate of discount which equates the present value of the expected returns on a project to the initial capital outlay required to fund that project.
   A. Nature of the Financial System  
   B. Levels of Profitability  
   C. Capital Stock Adjustment Model  
   D. Marginal Efficiency of Investment (MEI)  
   ANSWER: D
44. Greater availability of the firm’s own internally generated funds is seen as reducing the cost and lowering the risk of investment.
   A. Accelerator Theory
   B. Capital Stock Adjustment Model
   C. ‘Stop-go’ Public Policies
   D. Levels of Profitability
   ANSWER: D

45. UK banks are often criticised for ‘short-termism’ in their approach to lending.
   A. Levels of profitability
   B. Nature of the Financial System
   C. Accelerator Theory
   D. ‘Stop-go’ public policies
   ANSWER: B

II SHORT ANSWER TYPE QUESTIONS:

1. What is liquidity trap?
2. Define Induced Investment.
3. What are different measures of money supply by RBI?
4. How Keynesian theory of interest is indeterminate?
5. Define aggregate demand.
6. Define aggregate supply.
7. What determines the level of household consumption demand in an economy?
8. What is meant by average propensity to consume?
9. Define marginal propensity to consume.
10. What is autonomous consumption?
11. What do you mean by break even point?
12. Can the value of APC be greater than one?
13. Can APC be ever zero?
14. What is the relationship between APC and APS?
15. If APS is 0.6, how much will be the APC?
16. What is meant by effective demand?
17. If MPC and MPS are equal, what is the value of the multiplier?
18. What can be the minimum value of investment multiplier?
19. What can be the maximum value of multiplier?
20. Can average propensity to consume be negative?
21. What do you mean by investment multiplier?
22. What will be the impact of increase in cash reserve ratio on the aggregate demand?
23. What is investment?
24. Why can the value of marginal propensity to consume not be greater than one?
25. What is investment function?
26. In a closed economy, the marginal propensity to save increases and tax rates remain unchanged. What effect will this have on the marginal propensity to consume and on the multiplier?

27. In a closed economy with no government, a £1 billion increase in investment leads to a £5 billion increase in consumption. What is the value of the marginal propensity to consume?

28. The average propensity to consume in a country is 0.75 and the marginal propensity to consume is 0.8. What is the value of the multiplier?

29. What is marginal propensity to consume? How is it related to marginal propensity to save?

30. Can the value of APC be less than zero?

31. Why are interest payments by the government considered part of personal income but not part of national income?

32. Define private saving. How is the private saving used in the economy? What is the relationship between private saving & national saving?

33. Why are interest payments by the government considered part of personal income but not part of national income?

34. Derive saving-investment identity in the context of an open economy.

35. From national income accounting show that an increase in taxes (while transfer unchanged) must imply a change in net exports, government purchases or the saving investment balance.

### III LONG ANSWER TYPE QUESTIONS:

1. Explain the components of aggregate demand.

2. A given change in autonomous investment will lead to a larger change in income than itself. Why? Explain the process of income propagation with the help of dynamic multiplier.

3. Define autonomous and induced investment. What is the role of marginal efficiency of capital in decision making in respect of investment?

4. Explain the Keynesian approach on Full employment and Income.

5. Discuss the concepts of Marginal Efficiency of Capital and Marginal Efficiency of Investment.


7. Distinguish between average propensity to consume and marginal propensity to consume with the help of numerical examples.

8. What is meant by investment multiplier? Explain the relationship between MPC and K?

9. State briefly the effect of excess demand on output, employment and price.

10. Explain the concept of inflationary gap with the help of a diagram.

11. Explain the situation of deficient demand in an economy with the help of a diagram.

12. State briefly any three measures to control excess demand in an economy.

13. Distinguish between aggregate demand shocks and aggregate supply shocks.

14. Give the meaning of excess demand? Explain any two fiscal measures to current excess demand.
15. What do you mean by full employment equilibrium? Explain with the help of diagram.
16. Explain with the help of diagram the concept of under-employment equilibrium.
17. Distinguish between induced investment and autonomous investment?
18. Why must aggregate demand be equal to aggregate supply at the equilibrium level of income and output? Explain with the help of a diagram?
19. Explain the equilibrium level of income with the help of saving and investment curves. If saving exceeds planned investment, what changes will bring about the equality between them?
20. Explain the working of multiplier with the help of a numerical example.
21. When planned investment is more than planned savings, what will be its impact on income and employment. Explain with the help of diagram.
22. Can there be equilibrium in case of underemployment. Explain with the help of a diagram?
23. How quantitative and qualitative instruments of Govt. monetary policy controls deficient demand?
25. In an economy \( S = -50 + 0.5Y \) is the saving function (where \( S = \) saving and \( Y = \) national income) and investment expenditure is 7000. Calculate. (i) Equilibrium level of national income (ii) Consumption expenditure at equilibrium level of national income.
26. Explain how the monetary policy in an economy is beneficial to maintain equilibrium in the economy.
27. Briefly state the concept of consumption function. Explain with schedule and diagram.
28. Explain saving function with the help of schedule and diagram.
29. With the help of consumption schedule or curve bring out meaning of break-even point.
30. Explain how the Fiscal policy in an economy is beneficial to maintain equilibrium in the economy.
31. Why is the output level demand determined in the Simple Keynesian Model?
32. Assume that there is an increase in autonomous investment. Under which circumstances will the ultimate effect on the level of equilibrium income be greater
a) with a relatively high MPC or
b) a relative low MPC? Explain.
33. Why does monetary policy fail to moderate an aggregate supply shock?
34. Discuss the effect of a rise in desire to save on saving and income in the Keynesian model.
35. Discuss the output adjustment process in a Simple Keynesian Model. In this context mention the justification of the assumption that MPC is less than one.

UNIT - III

I MULTIPLE CHOICE QUESTIONS:
1. In the terminology of economics and money demand, the terms M1 and M2 are also known as:
   A. Short money
   B. Long money
   C. Broad money
   D. Narrow money
   ANSWER: D

2. In the terminology of economics and money demand, the terms M3 and M4 are also known as:
   A. Short money
   B. Long money
   C. Broad money
   D. Narrow money
   ANSWER: C

3. What is the currency deposit ratio (cdr)?
   A. ratio of money held by the public in currency to that of money held in bank deposits
   B. ratio of money held by public in bank deposits to that of money held by public in currency
   C. ratio of money held in demand drafts to that of money held in treasury bonds
   D. none of the above
   ANSWER: A

4. What is the Cash Reserve Ratio (CRR)?
   A. the fraction of the deposits that commercial banks lend to the customers
   B. the fraction of the deposits that RBI must keep with commercial banks
   C. the fraction of the deposits that commercial banks must keep with RBI
   D. none of the above
   ANSWER: C

5. What is the currency deposit ratio (cdr)?
   A. ratio of money held by the public in currency to that of money held in bank deposits
   B. ratio of money held by public in bank deposits to that of money held by public in currency
   C. ratio of money held in demand drafts to that of money held in treasury bonds
   D. none of the above
   ANSWER: A

6. If the economy is operating at potential GDP, an increase in the money supply will lead to:
   A. stagflation.
B. structural inflation.
C. demand-side inflation.
D. supply-side inflation.
ANSWER: C

7. As the economy nears full capacity, the short-run aggregate supply curve
A. becomes flatter.
B. becomes steeper.
C. shifts to the right.
D. shifts to the left.
ANSWER: B

8. Aggregate supply is the total amount
A. of goods and services produced in an economy.
B. produced by the government.
C. of products produced by a given industry.
D. Of labour supplied by all households.
ANSWER: A

9. Deflation is
A. an increase in the overall level of economic activity.
B. an increase in the overall price level.
C. a decrease in the overall level of economic activity.
D. a decrease in the overall price level.
ANSWER: D

10. The practice of using fiscal and monetary policy to stabilise the economy is known as
A. fine tuning of demand
B. monetarism
C. laissez faire economics
D. supply side economics
ANSWER: A

11. Government policies that focus on increasing production rather than demand are called:
A. fiscal policies.
B. monetary policies.
C. incomes policies.
D. supply-side policies.
ANSWER: D

12. Prices that do not always adjust rapidly to maintain equality between quantity supplied and quantity demanded are
A. market prices.
B. sticky prices.
C. fixed prices.
D. regulatory prices.
ANSWER: B
13. Say’s law states that:
   A. Supply creates its own demand.
   B. Demand creates its own supply.
   C. There is no such things as a free lunch
   D. Macroeconomic policy activism is essential to ensure full-employment.
   ANSWER: A

14. The aggregate supply (AS) curve and aggregate demand (AD) curve in a realistic Keynesian world are:
   A. AS: fully horizontal; AD: downward sloping
   B. AS: horizontal only till the full capacity level; AD: downward sloping
   C. AS: vertical; AD: upward sloping
   D. AS: horizontal; AD: vertical
   ANSWER: B

15. In the circular flow of income, Keynesian equilibrium obtains when
   A. All the individual sectors are in equilibrium: S=I, T=G, M=X
   B. The aggregate injections equal aggregate withdrawals S+T+M = I+G+X
   C. There is no inflation or unemployment
   D. The interest rate and exchange rate are at their market clearing levels
   ANSWER: B

16. In the circular flow of income, Keynesian equilibrium obtains when
   A. All the individual sectors are in equilibrium: S=I, T=G, M=X
   B. The aggregate injections equal aggregate withdrawals S+T+M = I+G+X
   C. There is no inflation or unemployment
   D. The interest rate and exchange rate are at their market clearing levels
   ANSWER: B

17. Under conditions of Keynesian equilibrium:
   A. aggregate demand equals aggregate supply
   B. aggregate demand equals national income
   C. both A and B
   D. none of the above
   ANSWER: C

18. As the MPS increases, the multiplier will
   A. increase.
   B. either increase or decrease depending on the size of the change in investment.
   C. remain constant.
   D. decrease.
   ANSWER: D

19. In macroeconomics, equilibrium is defined as that point at which
   A. planned aggregate expenditure equals aggregate output.
   B. planned aggregate expenditure equals consumption.
C. aggregate output equals consumption minus investment.
D. saving equals consumption.
ANSWER: A

20. The ratio of the change in the equilibrium level of output to a change in some autonomous component of aggregate demand is the
A. elasticity coefficient.
B. multiplier.
C. marginal propensity of the autonomous variable.
D. Automatic stabilizer.
ANSWER: B

21. The major problem of barter is the need for a ______-coincidence of wants.
A. Double
B. Single
C. Treble
ANSWER: A

22. The increase in interest rates lowers people’s demand for money.
A. True
B. False
ANSWER: B

23. An open market purchase of government securities (such as Treasury Bills) by the Fed will decrease the money supply and raise the interest rate.
A. True
B. False
ANSWER: B

24. Reductions in aggregate supply could be the cause of inflation, but the data show this is not the case.
A. True
B. False
ANSWER: B

25. In the long run, unemployment is independent of the inflation rate.
A. True
B. False
ANSWER: A

26. Which one of the following is not a function of money?
A. Standard of deferred payment
B. Store of value
C. Means of barter
D. Medium of exchange
ANSWER: C

27. Which two of the following would (other things equal) result in a rise in prices under the ‘equation of exchange’ in the quantity theory of money?
(a) Fall in amount of money in circulation
(b) Fall in the rate at which a given amount of money in circulation is passed from one person to another
(c) Rise in the rate at which a given amount of money in circulation is passed from one person to another
(d) Lower the fraction of a given amount of money in circulation which is held as an asset (i.e. as a form of wealth)
A. (a) and (b)
B. (a) and (c)
C. (c) and (d)
D. (a) and (d)
ANSWER: C

28. Which three of the following are often claimed as advantages of a single currency?
(a) Lower costs of exchange
(b) No need for independent monetary policy
(c) Reduced exchange rate uncertainty
(d) Preventing speculative attacks on a currency
A. (a), (b) and (c)
B. (b), (c) and (d)
C. (a), (c) and (d)
D. (a) and (d)
ANSWER: C

29. Which two of the following circumstances would be most favourable (other things equal) for UK exporters to Eurozone countries?
A. A fall in the exchange rate of sterling against the euro
B. A rise in the exchange rate of sterling against the euro
C. A strengthening of the euro against sterling
D. A weakening of the euro against sterling
ANSWER: A and C

30. For the following five questions, match each description with its correct term.
The suggestion that holdings of money depend in part on the value of expenditures undertaken by households in any given time period.
A. Transactions Demand for Money
B. Open Market Operations
C. Quantity Theory of Money
D. Liquidity Trap
ANSWER: A
31. When interest rates become so low that everyone believes the next change is upwards, so that no one wishes to hold assets such as bonds, preferring to hold money instead.
   A. Open Market Operations
   B. Transactions Demand for Money
   C. Quantity Theory of Money
   D. Liquidity Trap
   ANSWER: D

32. Purchases or sales of government bills and bonds used as a means of influencing the liquidity positions of banks.
   A. Open Market Operations
   B. Transactions Demand for Money
   C. Money Supply Multiplier
   D. Liquidity Trap
   ANSWER: A

33. The suggestion that changes in the price level are directly related to changes in the money stock.
   A. Quantity Theory of Money
   B. Liquidity Trap
   C. Transactions Demand for Money
   D. Money Supply Multiplier
   ANSWER: A

34. Where different elements in the money stock are weighted according to the extent to which they function as a medium of exchange.
   A. Liquidity Trap
   B. Open Market Operations
   C. Money Supply Multiplier
   D. Divisia Index
   ANSWER: D

35. The Keynesian ‘Speculative demand for money’ suggests that a fall in the rate of interest will cause investors to switch from holding assets such as bonds to holding cash, thereby increasing the demand for money.
   A. True
   B. False
   C. Uncertain
   D. Probabilistic
   ANSWER: B

36. Which one of the following is not a function of money?
   A. Store of value
   B. Unit of account
   C. Means of barter
   D. Standard of deferred payment
ANSWER: C

37. Which two of the following would (other things equal) result in a rise in prices under the ‘equation of exchange’ in the quantity theory of money?
   a) Fall in amount of money in circulation
   b) Fall in the rate at which a given amount of money in circulation is passed from one person to another
   c) Rise in the rate at which a given amount of money in circulation is passed from one person to another
   d) Lower the fraction of a given amount of money in circulation which is held as an asset (i.e. as a form of wealth)

A. c) and d)
B. b) and d)
C. a) and c)
D. a) and d)

ANSWER: A

38. Which two of the following are still published in the UK when measuring the stock of money?
   a) Notes and coin
   b) M1
   c) M2
   d) M4

A. and d)
B. and c)
C. and d)
D. and d)

ANSWER: A

39. Which three of the following are often claimed as advantages of a single currency?
   a) Lower costs of exchange
   b) No need for independent monetary policy
   c) Reduced exchange rate uncertainty
   d) Preventing speculative attacks on a currency

A. a), c) and d)
B. a), d) and b)
C. a), b) and c)
D. b), c) and d)

ANSWER: A

40. Which two of the following circumstances would be most favourable (other things equal) for UK exporters to Eurozone countries?
   a) A fall in the exchange rate of sterling against the euro
   b) A rise in the exchange rate of sterling against the euro
   c) A strengthening of the euro against sterling
d) A weakening of the euro against sterling  
A. a) and d)  
B. a) and d)  
C. a) and c)  
D. c) and d)  
ANSWER: C

40. For the following five questions, match each description with its correct term.  
The suggestion that holdings of money depend in part on the value of expenditures undertaken by households in any given time period is known by which term?  
A. Liquidity Trap  
B. Divisia Index  
C. Quantity Theory of Money  
D. Transactions Demand for Money  
ANSWER: D

42. When interest rates become so low that everyone believes the next change is upwards, so that no one wishes to hold assets such as bonds, preferring to hold money instead is known by which term.  
A. Quantity Theory of Money  
B. Transactions Demand for Money  
C. Open Market Operations  
D. Liquidity Trap  
ANSWER: D

41. Purchases or sales of government bills and bonds used as a means of influencing the liquidity positions of banks.  
A. Quantity Theory of Money  
B. Money Supply Multiplier  
C. Open Market Operations  
D. Transactions Demand for Money  
ANSWER: C

42. The suggestion that changes in the price level are directly related to changes in the money stock.  
A. Divisia Index  
B. Quantity Theory of Money  
C. Open Market Operations  
D. Money Supply Multiplier  
ANSWER: B

43. Where different elements in the money stock are weighted according to the extent to which they function as a medium of exchange.  
A. Quantity Theory of Money  
B. Liquidity Trap  
C. Divisia Index
D. Money Supply Multiplier
   ANSWER: C

II SHORT ANSWER TYPE QUESTIONS:

1. Discuss the limitations of the barter system.
2. “Money is a matter of functions four: a medium, a standard, a store.” Examine this statement in the light of various function of money.
3. “Money is what money does.” Explain.
4. Discuss the process of the evolution of money from commodity stage to paper currency.
5. What are various types of money?
6. Briefly mention the qualities of a good money.
7. “Money is the pivot around, which the economic science clusters”. Discuss.
8. How does the use of money overcome the difficulties of barter system?
9. “Money is not an unmixed blessing”. Discuss.
10. ‘Money is a good servant, but a bad master’. Comment.
11. Examine the simple model of monetary transmission mechanism.
12. Distinguish between narrow and broad measures of money supply.
13. State the determinants of demand for money according to modern monetarist theory?
14. Discuss the significance of the currency components in the supply of money. Do we include demand deposits under the supply of money?
15. What are the various money supply in India? Which of these measures are more important?
17. Define Deflation. How does it arise?
18. “The value of money other things being the same, varies inversely as its price.” Discuss.
19. What is meant by inflation? What are its various types?
20. What are the causes of inflation? Discuss its effect on production and distribution of income among various economic groups.
21. What are the causes of price rise in India? Explain particularly in the context of rise in money supply.
22. Discuss the consequences of Inflation in India
23. Discuss the concept of money supply with the public. What factors determine the supply of money in an economy?
24. Critically evaluate the cash balance equation.
25. Discuss the fundamental equations of Keynes. How these equations are superior to quantity equation of money?
26. How Does The Federal Reserve Control The Amount Of Money In The Economy?
27. Ideally, What Should Be The Goal Of The Cental Bank’s Monetary Policy?
28. What Influence Do Foreign Oil Producers Have On India’s Inflation?
29. How Can We Measure Inflation?
30. Explain the Friedman approach as a theory of money.
31. Derive money demand function from the quantity theory of money. Justify the necessary assumptions.
32. Explain how the current rate of inflation depends on current money supply as well as on expected growth of money supply.
33. The demand for nominal balances rises with the price level. At the same time inflation causes the real demand for money to fall. Explain how these two assertions can be both correct.

34. Present a brief exposition on the quantity theory of money. Identify the assumptions associated with it and interpret them.

35. Explain the relationship among money supply, velocity of circulation, price level and volume of economic transaction. Discuss the significance of the constancy of velocity of circulation of money.

III LONG ANSWER TYPE QUESTIONS:

1. Explain the theory of determining price-level. Do you agree inflation is better than deflation?
2. Critically examine and compare the theories of Keynesian and Friedmanian.
3. Discuss the concept of Balanced Budget Multiplier. Show that any change in investment financed through lump sum taxation will have an expansionary effect on income.
4. Discuss the Friedman Theory of demand for money. How is it different from Keynesian theory?
5. What is Money? Explain the classical, Keynesian and Friedman approach on Money.
6. Define money. Explain the various functions of money. Can bank or paper money in isolation perform all these functions satisfactorily?
7. “The essential characteristic of money, which sets it apart from all other substances, is that it is not desired for itself. In the fullest sense, it is a medium or means or mechanism of exchange”. Examine this statement.
8. Money, which is a source of blessing to mankind becomes also a source of misery, confusion and chaos, if not controlled properly. Comment.
9. Examine the significance and importance of money in the capitalist and socialist economies, particularly to consumers and producers.
10. ‘Money itself creates nothing. It is lubricant of real economic processes of production and distribution of goods and services and a means of attaining social justice’. Examine.
11. What would happen to the economy of India, if money suddenly disappears or becomes worthless?
12. “Money which is a source of so many blessings to mankind becomes also, unless we can control it, a source of peril and confusion.” Comment.
13. Why is money demanded? How is the Keynesian approach different from the classical approach in this regard?
14. Discuss the determinants of transaction demand for money. How is it different from asset demand for money?
15. What are the three motives for holding money? Is the demand for money a function of the level of income or the rate of interest?
16. Write short notes on:
   (a) Liquidity Trap
   (b) Elasticity of demand for money
   (c) Measures of money supply
   (d) How powered money theory of money supply
17. How is quantity of money related to the level of price and the value of money? Does an increase in money supply always cause the general price level to rise proportionately?

18. Discuss Fisher’s Quantity Theory of money with the help of Fisher’s Equation and Cash Balances Equations. Which of these two do you regard superior and why?

19. Discuss Keynesian criticism and approach to the quantity theory of money. How is Keynes’ equation better than other cash balance equations?

20. Would you call inflation in India as demand pull or cost push? Give reasons in support of your answer.

21. “Inflationary gap arises when money expands more than in proportion to income earning activity”. Explain and suggest the necessary measures to bridge any such gap in a developing economy.

22. How does inflation arise? What measures would you recommend to control it? Discuss their suitability to check demand pull and cost push inflation.

23. What are the causes of recent inflation in India? What measures have been taken by the government to arrest inflation?

24. What are the causes of deflation on the different sections of society? How it can be controlled?

25. Elucidate “Inflation is unjust and deflation is inexpedient, of the two deflation is worse.”

26. Explain the various theories of money in detail.

27. Identify the main affects on business of increasing rates of inflation.

28. Examine whether the monetary policy is only one of the policies used by government to control the economy.

29. Explain the reasons why is inflation considered to be a problem for an economy.

30. Explain the relevance of quantity of money in affecting the level of price and the value of money in an economy?

31. Construct loanable funds market in the context of an open economy assuming that the home country is a small open economy. Discuss the effect of an increase in the govt. expenditure (on expansionary fiscal policy) in the foreign country on home country’s loanable fund market.

32. The economic recovery in India in the decade of the 1980s was driven by the emergence of large fiscal and trade deficit. This had the ultimate effect of raising the real interest rate and crowding out private investment. Illustrate the above phenomenon with the help of loanable funds thereby.

33. Suppose that monetary base is Rs. 20 billion. Public holds 20 percent of economy’s money stock in cash and the remaining 80 per cent in bank deposits and banks wish to hold a 5 per cent of cash reserve. What will the size of money stock?

34. Explain the mechanism of the multiple expansions of bank assets and liabilities. What are the factors that affect money supply?

35. What are the determinants of money supply in an economy? In which way the aggregate money supply may be dependent on the rate of interest?

UNIT - IV

I MULTIPLYER CHOICE QUESTIONS:
1. Which of the following policy options would simultaneously increase interest rates and decrease output?
A. The Federal Reserve Board sells bonds through open market operations.
B. The federal government increases its defense purchases.
C. The Federal Reserve Board expands the money supply.
D. The federal government increases the tax rate.
ANSWER: A

2. Consider two economies that are identical, with the exception that one has a high marginal propensity to consume (MPC) and one has a low MPC. If the money supply is increased by the same amount in each economy, the high MPC economy will experience
A. A larger increase in output and a smaller decrease in the interest rate.
B. A smaller increase in output and a smaller decrease in the interest rate.
C. A larger increase in output and a larger decrease in the interest rate.
D. A smaller increase in output and a larger decrease in the interest rate.
ANSWER: A

3. Suppose an economy is running a government budget deficit. Assume that \( C = c0 + c1(Y - T) \). Which one of the following will cause this deficit to become larger?
A. Expansionary monetary policy.
B. An increase in exports.
C. A decrease in equilibrium GDP.
D. A decrease in taxes.
ANSWER: D

4. Suppose that investment (I) in the goods market is not responsive to the interest rate (that is, it does not depend on the interest rate at all). Then
A. The IS curve is a vertical line and monetary policy is very effective in raising output.
B. The IS curve is a horizontal line and monetary policy is very effective in raising output.
C. The IS curve is a vertical line and monetary policy does not affect output in the IS-LM model.
D. The IS curve is a horizontal line and monetary policy does not affect output in the IS-LM model.
ANSWER: C

5. An increase in the money supply and a drop in consumer confidence will lead to
A. A decrease in output with an ambiguous effect on the interest rate.
B. An increase in output and a decrease in the interest rate.
C. A decrease in output and an increase in the interest rate.
D. An ambiguous effect on output and a decrease in the interest rate.
ANSWER: D

6. Fiscal policy refers to the
A. government's ability to regulate the functioning of financial markets.
B. spending and taxing policies used by the government to influence the level of economy activity.
C. techniques used by firms to reduce its tax liability.
D. the policy by MAS to affect the cash rate
ANSWER : B

7. Which of the following does not act as an automatic stabilizer? :
   A. The personal Income tax system
   B. Government expenditure on road building programmes
   C. Unemployment Benefit payments
   D. The Goods and Service Tax (GST)
ANSWER : B

8. An automatic stabilizer is:
   A. The tendency for inflation to fall as unemployment rises.
   B. A monetary or a fiscal policy that aims to smooth out the business cycle.
   C. A tax or a form of government expenditure that has the effect of reducing the size of business cycle fluctuations.
   D. A policy for growth of an economy where the current account of the balance of payments is kept in balance.
ANSWER : C

9. Which of the following is an example of discretionary fiscal policy:
   A. An increase
   B. Oligopoly
   C. Monopoly
   D. Monopolistic Competition
ANSWER : B

10. An increase in oil prices, such as the oil shocks in the 70s, lead to____thereby causing ___.
    A. a movement along the AS curve; cost-push inflation
    B. a leftward shift in the AS curve; demand-pull inflation
    C. a rightward shift in the AS curve; cost-push inflation
    D. a leftward shift in the AS curve; cost-push inflation
ANSWER : D

11. In the 1930s, when Keynes was alive, a expansionary fiscal policy, taking everything else constant, would have led (in the short-run) to________
    A. a relative large increase in Y, a smaller increase in P
    B. a relative large increase in P, a smaller increase in Y
    C. both Y and P increasing with an percentage
    D. only Y increased
ANSWER : A
12. If the aggregate supply curve is vertical in the long-run, _______ has (have) an effect on the aggregate output in the long run
   A. sometimes monetary and/or fiscal policy (i.e. it depends)
   B. monetary policy does but fiscal policy does not
   C. monetary policy does not but fiscal policy does
   D. neither monetary policy nor fiscal policy
   ANSWER : D

13. Which of the following statements is correct:
   A. the money supply does not play a role in sustained inflation
   B. the Fed is “accommodating” when they decrease the money supply after the government has increased G
   C. inflation initiated by an increase in aggregate demand is referred to as demand-pull inflation
   D. in order to avoid “crowding-out” after the government has increased G, the Fed often decreases the money supply in order to lower the interest rates
   ANSWER : C

14. Employment tends to _______ when aggregate output _______
   A. rise, falls
   B. rise; rises
   C. falls; rises
   D. not change; falls
   ANSWER : B

15. It was an empirical fact that in the 50s and 60s the inflation rate _______ when the unemployment rate _______. Today the relationship between those two variable can be described as ________
   A. falls; rises; strongly negative correlated
   B. rises; rises; strongly negatively correlated
   C. falls; rises; unstable
   D. rises; rises; unstable
   ANSWER : C

16. The __________ lag for fiscal policy is generally ______ than it is for monetary policy.
   A. recognition; shorter
   B. recognition; longer
   C. implementation; shorter
   D. implementation; longer
   ANSWER : D

17. During periods of negative demand shocks, deficit target reductions such as those mandated in the Gramm-Rudman-Hollings Act would tend to:
   A. stimulate the economy and increase employment.
   B. result in additional recessionary declines in employment and income.
   C. stimulate defense spending.
D. have an automatic stabilizing impact upon the economy.
ANSWER: B

18. In which cases would the deficit of a government be considered problematic by the majority of the economists?
A. when the deficit was the result of mainly capital spending (eg infrastructure)
B. when the deficit was brought about by a stabilization program during a probably temporary recession
C. when the deficit adds to an existing budget surplus
D. when the private and public lenders (i.e. IOU holders) lose faith in the capacity of the government to pay back its debts
ANSWER: D

19. A bond is
A. a promise to pay back a loan over an unspecified period
B. allows the firm to access funds with no liabilities
C. the only way a firm can raise funds
D. a document that promises to pay back a loan under specified terms over a specified period of time
ANSWER: D

20. The market price of bonds can fluctuate depending on
A. how many bonds were sold
B. who bought the bonds
C. the amount of the coupon
D. the interest rate
ANSWER: D

21. Monetary policy has a shorter inside time lag than fiscal policy while it has a longer outside lag than fiscal policy.
A. True
B. False
ANSWER: A

22. In an open economy, fiscal policy is more effective than (or at least as effective as) monetary policy (in terms of changing output).
A. True
B. False
ANSWER: B

23. A country experiencing payments deficit and domestic inflation should use tight monetary and fiscal policies to restore equilibrium.
A. True
B. False
ANSWER: A
24 Using expansionary monetary and fiscal policies will help eliminate the recession but will worsen the payments deficit.
A. True
B. False
ANSWER: B

25 Expansionary fiscal policy is more effective when it is financed by borrowing from the public than when it is monetized.
A. True
B. False
ANSWER: B

26 Income tax, corporate tax, inheritance tax etc. are incident on the person or organisation. These taxes are called:
A. local tax
B. indirect tax
C. direct tax
D. Rate
ANSWER: C

27 Which of the following represent the standard of living in a country?
A. National income
B. Per capita income
C. Poverty ratio
D. Unemployment rate
ANSWER: B

28 By which bill does the government make arrangement for the collection of revenues for a year?
A. Supplementary Budget
B. Finance Bill
C. Fiscal Budget
D. Economic Bill
ANSWER: B

29 National income of a country is determined on the basis of:
A. Total revenue of the state
B. Net profit earned and expenditure incurred by the state
C. Production of goods and services
D. All of the above
ANSWER: C

30 Which of the following is not a method of estimating national income?
A. Income method
B. Value-added method
C. Expenditure method
D. Export-import method
ANSWER: D

31. The national income of India is calculated mainly through:
A. Production method alone
B. Expenditure method alone
C. Production and expenditure methods
D. Production, income and expenditure method
ANSWER: D

32. An ad valorem duty is a tax on the basis of:
A. the price of a commodity
B. the value added
C. the advertisement expenditure
D. the unit of the commodity
ANSWER: A

33. Which of the following is not likely to be a government objective?
A. Increasing employment
B. Increasing economic growth
C. Increasing government spending
D. Increasing the level of exports
ANSWER: C

A. "Reducing inflation is a more important objective than economic growth" is an example of:
A. Normative economics
B. Positive economics
C. Objective economics
D. Reality economics
ANSWER: A

34. Which of the following is not a macroeconomic issue?
A. Unemployment
B. Inflation
C. The wages paid to footballers
D. Economic growth
ANSWER: C

35. Other things equal, a decrease in autonomous consumption shifts the _____ curve to the _____.
A. IS; right
B. IS; left
C. LM; left
D. LM;
ANSWER: B

36. In the Keynesian cross diagram, a decline in autonomous consumer expenditure causes the aggregate demand function to shift _____ and the equilibrium level of aggregate output to _____.
A. up; rise
B. up; fall
C. down; rise
D. down; fall
ANSWER: D

37. In the Keynesian cross diagram, an increase in autonomous consumer expenditure causes the aggregate demand function to shift _____ and the equilibrium level of aggregate output to _____.
A. up; rise
B. up; fall
C. down; rise
D. down; fall
ANSWER: A

38. In the Keynesian cross diagram, an increase in autonomous consumer expenditure causes the aggregate demand function to shift _____, the equilibrium level of aggregate output to rise, and the IS curve to shift to the _____.
A. up; left
B. up; right
C. down; left
D. down;
ANSWER: B

39. In the Keynesian cross diagram, a decline in autonomous consumer expenditure causes the aggregate demand function to shift _____, the equilibrium level of aggregate output to fall, and the IS curve to shift to the _____.
A. up; left
B. up; right
C. down; left
D. down;
ANSWER: C

40. In the Keynesian cross diagram, a decline in autonomous consumer expenditure causes the aggregate demand function to shift down, the equilibrium level of aggregate output to _____, and the IS curve to shift to the _____.
A. rise; left
B. rise; right
C. fall; left
D. fall; right
ANSWER: C
41. In the Keynesian cross diagram, an increase in autonomous consumer expenditure causes the aggregate demand function to shift up, the equilibrium level of aggregate output to _____, and the IS curve to shift to the _____.
   A. rise; left
   B. rise; right
   C. fall; left
   D. fall; right
   ANSWER: B

42. An increase in autonomous consumer expenditure causes the equilibrium level of aggregate output to _____ at any given interest rate and shifts the _____ curve to the _____.
   A. rise; LM; right
   B. rise; IS; right
   C. fall; LM; left
   D. rise; IS; left
   E. fall; IS;
   ANSWER: B

43. A decrease in autonomous consumer expenditure causes the equilibrium level of aggregate output to _____ at any given interest rate and shifts the _____ curve to the _____.
   A. rise; LM; right
   B. rise; IS; right
   C. fall; IS; left
   D. rise; LM; left
   E. fall; IS;
   ANSWER: C

44. Changes in the interest rate affect planned investment spending and hence the equilibrium level of output,
   A. but this change in investment spending merely causes a movement along the IS curve and not a shift.
   B. but this change in investment spending is crowded out by higher taxes.
   C. but this change in investment spending is crowded out by higher government spending.
   D. but this change in investment spending is crowded out by lower consumer expenditures.
   ANSWER: A

II SHORT ANSWER TYPE QUESTIONS:

1. What is fiscal policy?
2. Explain IS-LM Model.
3. Elaborate Demonstration effect.
4. What is deflation?
5. Explain the meaning of monetary policy.
6. Discuss the present credit control policy of the Reserve Bank of India.
7. Discuss the working of monetary transmission mechanism.
8. Explain IS-LM model.
10. What do you understand by product market equilibrium?
11. Critically evaluate the effectiveness of monetary policy in India.
12. Why cannot fiscal policy provide a complete substitute for sound monetary policy?
13. What is money market equilibrium?
14. “Fiscal and monetary policies play contemporary role in a developing economy”. Comment.
15. Distinguish between the product and money market. Explain the interdependence of the two markets.
16. Discuss the impact of monetary and fiscal policies on the aggregate demand.
17. Evaluate the effectiveness of monetary and fiscal policies.
18. What do you understand by the concept of money market and product market? Give some suggestions to improve the working of money market in India.
19. Explain the nature of LM schedule in Keynesian, intermediate and the classical range. Discuss the effectiveness of fixed and monetary policy in these ranges.
20. Explain determination and shifts in simultaneous equilibrium in product and money markets.
21. Which is the most effective method of credit control? Explain the need and progress of selective credit control in India.
22. Why is Reserve Bank’s monetary policy is termed as a policy of ‘controlled expansion’?
23. Discuss the tools and the objectives of fiscal policy in the developing countries. What are the limitations?
24. Define fiscal and monetary policies. How do they affect product and money market equilibrium under four quadrant model.
25. What is ‘Crowding Out’ effect? What is its effect on the size of the multiplier.
26. Explain the relevance of open market operations in an economy.
27. What do you mean by credit rationing.
28. Explain how moral persuasion affects the practices of the commercial banks.
29. Explain how the policies of the central banks affect the commercial banks in an economy?
30. Explain in detail the meaning of “public expenditure”.
31. Briefly explain the Components of Fiscal Policy.
32. Explain the nature and significance of Fiscal Policy.
33. Explain the concepts of public revenue in India.
34. Explain the concepts of public expenditure in India.
35. What are the factors affecting the monetary policy? What role does RBI play in formulating monetary policy?

III LONG ANSWER TYPE QUESTIONS:
1. What is monetary policy? Explain the role of Bank rate and Margin requirements in influencing the availability of credit in an economy.
2. Explain the highlights of Recent Monetary Policy of Government and discuss it will help to reduce inflation in the country.
3. What is Inflation? Explain demand pull and Cost push inflation. What are the effects of inflation and how it can be controlled?
4. Explain the IS-LM model. Discuss its applications in monetary and fiscal policy.
5. What do you mean by monetary policy? Discuss the objectives of monetary policy in the developing countries. What are the limitations of monetary policy in these countries?
6. “The obvious aim of the monetary policy of a country is to attain equilibrium between saving and investment at the point of full employment.” Discuss.
7. Discuss the methods of credit control adopted by the Reserve Bank.
8. Examine the relative importance and effectiveness of quantitative and qualitative control methods pursued by the Reserve Bank of India under its monetary policy.
9. Explain the government uses its fiscal tools to revive the level of business activities?
10. How is fiscal policy different from monetary policy. Why are its effects direct, while those of monetary policy are indirect in nature?
11. What is an IS curve? How is it derived? Explain the relationship between the interest rate and GDP.
12. What factors determine the slope of an IS curve? Show graphically the shifts in this curve.
13. What is the effect of an increase in investment on the IS curve? Show graphically the shifts in this curve.
14. Define a LM curve. Derive it graphically and explain the relationship between the interest rate and GDP.
15. Explain the determinants of the slope of a LM curve. Show graphically the shifts in this curve.
16. The monetary authority of a country decides to pursue an expansionary monetary policy and start purchasing government securities for the same. How will this affect the LM curve?
17. How is the LM affected by the change in money supply and the demand for money?
18. Show a disequilibrium combination that finds interest rate (r) and income (Y) to the right of the IS curve implying an excess of saving over planned investment. What kind of dynamic response will this produce?
19. Explain the concept and conditions of the general equilibrium. Show graphically why an economy is in disequilibrium when the product market equilibrium is not consistent with the money market equilibrium?
20. Derive AD curve from IS-LM model.
21. Explain the impact of the introduction of the government in 2 sector IS-LM model on the general equilibrium.
22. Discuss the elasticity of IS and LM curves. What are the factors on which their elasticity depends? How does the elasticity of these affect the effectiveness of monetary and fiscal policies?
23. What is liquidity trap? Discuss the effectiveness of monetary policy under the condition of a liquidity trap.
24. “In the intermediate range, an expansionary fiscal policy is expected to raise both the rate of interest and the level of income while an expansionary monetary policy lowers the rate of interest as it raises the level of income.” Explain with diagram.

25. What is meant by the Keynesian, intermediate and the classical range of the LM curve? Explain the efficacy of fiscal and monetary policy in these ranges.

26. Explain the conditions of disequilibrium between product market and money market?

27. Explain the role of the policy of RBI in affecting the situation of liquidity trap in an economy.

28. Critically evaluate the qualitative control methods pursued by the Reserve Bank of India in context to monetary policy.

29. Explain the situations when the central bank adopts the contractionary and expansionary monetary policy in an economy.

30. Explain the difference between Product market and money market.

31. Distinguish in brief between the
   a) Budgetary Deficit and Fiscal Deficit
   b) Revenue receipts and Capital receipts

32. Analyze the objectives of monetary policy.

33. What are the tools of monetary policy?

34. Distinguish between Repo rate and Reverse Repo rate

35. Explain the concepts development activities in India basing the Fiscal policy.
QUESTION BANK
COST ACCOUNTING - B.COM. 108
B.COM(H) - II

UNIT - I

I MULTIPLE CHOICE QUESTIONS:

1 ______ aims at safeguarding the interest of the business and its proprietors and others
Connected with it.
A. Cost Accounting
B. Management Accounting
C. Financial Accounting
D. All of the above
ANSWER: C

2 Break -even point means point of___________
A. No profit no loss
B. Profit
C. Loss
D. Normal returns
ANSWER: A

3 The technique and process of ascertaining cost is termed as___________
A. Cost accountancy
B. Costing
C. Auditing
D. Cost apportionment
ANSWER: B

4 Cost accounting is a tool of _________________ accounting.
A. Management Accounting
B. Financial Accounting
C. Both a & b
D. None of the above
ANSWER: A

5 Accounting may be classified into financial accounting and _____________
A. Auditing
B. Management Accounting
C. Cost accounting
D. Both b) and c)
ANSWER: B

6 Incremental cost is a type of:
A. Differential cost
B. Out-of-pocket cost  
C. Conversion cost  
D. None  
ANSWER: A

7 Variable cost per unit:  
A. Remains fixed  
B. Fluctuates with the volume of production  
C. Varies in proportion to volume of sales  
D. Varies with budget  
ANSWER: B

8 Fixed cost per unit increases when:  
A. Production volume decreases  
B. Production volume increases  
C. Variable cost per unit decreases  
D. Variable cost per unit increases  
ANSWER: A

9 Opportunity cost helps in:  
A. Ascertainment of cost  
B. Controlling cost  
C. Making managerial decisions  
D. All of the above  
ANSWER: C

10 Conversion cost  
B. Normal cost  
C. Traceable cost  
D. Avoidable cost  
ANSWER: A

11 A cost which does not involve any cash outflow is called_______ or ____________  
A. Marginal cost  
B. Replacement cost  
C. Avoidable cost, unavoidable cost  
D. Notional cost, Imputed cost  
ANSWER: D

12 A cost is one that has already been incurred and cannot be avoided by decisions taken in the future:  
A. Sunk cost  
B. Shut Down cost  

C. Differential cost
D. Common cost
ANSWER: A

13 Direct material is a ___________
A. Fixed cost
B. Variable cost
C. Semi-variable cost
D. Step cost
ANSWER: B

14 Which of the following documents is used for issuing materials to the production departments?
A. Purchase requisition
B. Material requisition
C. Goods received notes
D. None
ANSWER: B

15 A bill of materials is:
A. A schedule of materials needed for a job.
B. An invoice for the materials supplied.
C. An acknowledgement of the receipt of materials
D. All of the above
ANSWER: A

16 _______ is a devise for breaking up or separating costs into smaller sub-divisions.
A. Cost centre
B. Cost unit
C. Both A and B
D. Neither A nor B
ANSWER: B

17 In case of Weighted Average Price method, the need for calculating a new issue price arises every time when:
A. A new purchase is made
B. A new issue is made
C. Both, a new issue and new purchase is made
D. Both A and C
ANSWER: A

18 LIFO method of pricing material issues is suitable for:
A. Bulky material
B. Perishable materials
C. Bulky and non-perishable materials
D. Non-perishable material
ANSWER: C

19 A firm using base stock method of pricing materials issue may adopt:
A. FIFO Method
B. LIFO Method
C. Any of the two
D. None
ANSWER: C

20 Material losses may be normal or______________:
A. Abnormal
B. Average
C. Above average
D. None
ANSWER: A

21 Costs which are not associated with production are called:
A. Period Costs
B. Product costs
C. Sunk costs
D. Shutdown costs
ANSWER: A

22 ______ are those costs which would be changed by the managerial decision:
A. Irrelevant costs
B. Relevant costs
C. Direct costs
D. Indirect costs
ANSWER: B

23 ______costs are those which would not be affected by the managerial decision:
A. Irrelevant costs
B. Relevant costs
C. Direct costs
D. Indirect costs
ANSWER: A

24 The ______ costs are difficult to trace to a single product or it is uneconomic to do so:
A. Irrelevant costs
B. Sunk costs
C. Direct costs
D. Indirect costs
ANSWER: D
25. These costs are incurred to maintain certain facilities and cannot be quickly eliminated. The management has little or no discretion in this cost, e.g., rent, insurance etc.:
   A. Committed costs
   B. Policy & managed costs
   C. Discretionary costs
   D. Step costs
   ANSWER: A

26. The basic objective of cost accounting is __________:
   A. tax compliance
   B. financial audit
   C. cost ascertainment
   D. profit analysis
   ANSWER: C

27. Cost Classification can be done in __________:
   A. Two ways
   B. Three ways
   C. Four ways
   D. Several ways
   ANSWER: D

28. The cost which is to be incurred even when a business unit is closed is called ________:
   A. Imputed Cost
   B. Historical Cost
   C. Sunk Cost
   D. Shutdown cost
   ANSWER: D

29. Direct expenses are also called ____________:
   A. major expenses
   B. chargeable expenses
   C. overhead expenses
   D. sundry expenses
   ANSWER: B

30. Indirect material used in the production is classified as _______:
   A. office overhead
   B. selling overhead
   C. distribution overhead
   D. factory overhead
   ANSWER: D

31. Warehouse rent is a part of ________:
   A. prime cost
   B. factory cost
32. Indirect Material scrap is adjusted along with ________:
   A. prime cost
   B. factory cost
   C. labour cost
   D. cost of goods sold
   ANSWER: B

33. Total of all direct costs is termed as ______:
   A. prime cost
   B. works cost
   C. cost of sales
   D. cost of production
   ANSWER: A

34. Audit fees is a part of __________:
   A. works on cost
   B. selling overhead
   C. distribution overhead
   D. administration overhead
   ANSWER: D

35. Cost accounting concepts include all of the following except ________:
   A. planning
   B. controlling
   C. profit sharing
   D. product costing
   ANSWER: C

36. When new material is purchased, it is recorded in:
   A. Receipts columns
   B. Issue column
   C. Balance column
   ANSWER: A

37. When material is issued, it is recorded in:
   A. Receipts column
   B. Issue column
   C. Balance column
   ANSWER: B

38. FIFO means:
   A. First in first out
   B. For income first out
Material returned to supplier is recorded in column:
A. Receipts
B. Issue
C. Balance
ANSWER: A

Red entry in store ledger card is made when material is returned from:
A. Factory to store
B. Store to factory
C. Store to supplier
ANSWER: B

To calculate average price, the total cost is divided by:
A. Total received units
B. Total issued units
C. Total units in hand
ANSWER: A

Material returned from factory to store is recorded in column:
A. Receipts
B. Issue
C. Balance
ANSWER: B

Which method is used for valuation of material issued:
A. Cost price method
B. Market price method
C. Standard price method
D. All above
ANSWER: D

The opening inventory of material is recorded in the store ledger card in:
A. Receipts column
B. Issue column
C. Balance column
D. none of above
ANSWER: C

Which one is comparatively difficult method to record the calculation of material:
A. LIFO
B. FIFO
C. Average
ANSWER: C
II SHORT ANSWER TYPE QUESTIONS:

1. “The term ‘cost’ must be qualified according to its context”. Discuss this statement referring to important concepts of cost.
2. Distinguish between costing and cost accounting or Costing’ and ‘cost accounting’ are the same.
3. What do you mean by elements of cost? Discuss the various elements of cost.
4. Define and explain the terms (a) cost centre and (b) cost unit.
5. State the difference between Bin Card and store ledger.
6. Write brief note on Continuous Physical Stock Verification.
7. Explain the concept of Scrap and spoilage.
8. Define inventory control. Why is inventory control necessary?
9. Distinguish between direct material and indirect material.
10. What are the requisites of a good inventory control system?
11. What are the different methods of controlling inventory?
12. Discuss the advantages and disadvantages of centralized purchasing of raw materials.
13. Explain what is ‘minimum level’, ‘maximum level’, ‘ordering level’, quantity. How are they determined?
14. Explain ABC analysis. What are its merits?
15. Define and explain the following terms and the treatment given in Cost Accounts:
   (a) Waste
   (b) Scrap
   (c) Spoilage
   (d) Defectives
16. “Costing is an aid to the management”. Discuss.
17. Mention with reasons the type of costing you will adopt in the following industries:
   (a) Cement manufacturing,
   (b) Soap manufacturing,
   (c) Railways,
   (d) Ship-builders.
18. Distinguish between Products costs and Period costs.
19. Explain the concept of Activity Based Costing.
20. What is meant by “Economic Order Quantity”?
21. Explain the objectives of Inventory Control.
22. Materials X and Y are used as follows: Minimum usage − 50 units each per week Maximum usage − 150 units each per week Normal usage − 100 units each per week Ordering quantities X = 600 units Y = 1,000 units Delivery period X = 4 − 6 weeks Y = 2 − 4 weeks Calculate for each material (i) Maximum level (ii) Minimum level and (iii) Ordering level.

Ace Ltd. manufactures a product and the following particulars are collected for the year ended March, 2013:

- Monthly demand (units) 250
- Cost of placing an order (₹) 100
- Annual carrying cost (₹ per unit) 15
Normal usage (units per week) 50
Minimum usage (units per week) 25
Maximum usage (units per week) 75
Re-order period (weeks) 4–6

You are required to calculate:
(i) Re-order quantity
(ii) Re-order level
(iii) Minimum level
(iv) Maximum level
(v) Average stock level.

(CMA Executive , pg.50)

24 One parcel containing two important materials was received by a factory and the invoice pertaining to the same discloses the following information:

₹
Material-I 500 kgs. @ ₹2.00 per kg. 1,000.00
Material-II 600 kgs. @ ₹1.60 per kg. 960.00
Insurance 39.20
Sales Tax 98.00
Freight etc. 55.00

Due to mishandling in the factory’s store a loss of 10 units of material-I and 6 units of material-II was noted. What rate would you adopt, for issuing these vital components to the jobs? Also give your changed rate, if a provision of 10% is to be kept for probable risk of obsolescence.

(CMA Executive , pg.67)

25 A company manufacturers 5,000 units of a product per month. The cost of placing an order is ₹ 100. The purchase price of the raw material is ₹ 10 per kg. The re-order period is 4 to 8 weeks. The consumption of raw materials varies from 100 kg. to 450 kg. per week. The average weekly consumption being 275 kg. The carrying cost of inventory is 20% per annum.

Assuming 52 weeks in a year, you are required to calculate —
(i) Re-order quantity;
(ii) Maximum level;
(iii) Minimum level; and
(iv) Average level.

(CMA Executive, pg.52)

26 Calculate Economic Order Quantity (EOQ) from the following:
Annual consumption 6,000 units
Cost of ordering Rs. 60
Carrying costs Rs. 2

27 From the following particulars, calculate the Economic Order Quantity (EOQ):
Annual requirements 1,600 units
Cost of materials per units Rs. 40
Cost of placing and receiving one order: Rs. 50
Annual carrying cost for inventory value 10%
28. Calculate EOQ from the following?
   Consumption during the year = 600 units
   Ordering cost Rs. 12 per order
   Carrying cost 20%
   Selling Price per unit Rs. 20

29. Explain the advantages that accrue in using LIFO method of pricing of valuation of raw material stock.

30. Write short note on various stock levels.

31. Explain the objectives and scope of cost accounting.

32. Explain fixed cost, variable cost, semi variable cost and step costs.

33. Write short notes on the following:
   a) Idle Time
   b) Overtime
   c) VED technique of material control
   d) ABC technique of material control
   e) Product and Period Costs
   f) Weighted Average method

34. Write a short note on Cost centres.

35. The annual demand of a particular item of inventory is 10,000 units. Inventory carrying cost is 20% and ordering cost is ₹40 per order. The price quoted by the supplier is ₹4 per unit. However, the supplier is willing to give discount of 5% for orders of 1500 units or more. Is it worth to avail the discount offer?

III. LONG ANSWER TYPE QUESTIONS:

1. What is meant by cost accounting? In what essential respects does cost accounting differ from financial accounting?

2. Distinguish between:
   a) Cost centre and cost unit.
   b) Cost allocation and cost apportionment.

3. Write short notes on:
   a) Profit centre
   b) Committed Fixed cost
   c) Opportunity cost
   d) Absorption costing

4. Distinguish between cost estimation and cost ascertainment. Explain why both are important to a manufacturing concern.

5. Bring out clearly the working of Perpetual Inventory and Periodic Inventory Systems in inventory management.

6. Distinguish between LIFO and FIFO methods of pricing the issues of materials, which one do you think is better and why in case of inflationary conditions?

7. Distinguish between:
   a) Perpetual Inventory System and Continuous Stock-taking.
   b) Bill of materials and Material Requisition Note.

8. Describe briefly the various methods of costing. State giving reasons which method of
costing you would recommend for the use in the following:
   a) Chemical Works
   b) Nursing Home.
   c) Road Transport company
   d) Painter & Decorator
   e) Coal

9. Explain the following terms:
   a) Cost classification
   b) Cost apportionment
   c) Cost allocation
   d) Cost absorption

10. “Cost Accountancy, Cost Accounting and costing are synonymous terms”. Do you agree with the statement? Support your answer with reasons.

11. Explain the concepts of ABC Analysis and JIT.

12. You have been asked to design a system of cost accounting for installation in a factory. Describe the essentials that should be considered before you design such a system.

13. What do you mean by elements of cost? Discuss the various elements of cost.

14. Cost accounting assists: (a) in controlling efficiency; (b) in pricing products; and (c) in providing a basis for operating policy. Amplify these points, giving reasons for your views.

15. What are the different methods of controlling inventory?

16. What is a cost Centre? State briefly the different types of cost centres?

17. Write the most appropriate answer from the given options in respect of the following:
   The annual demand is 1,000 units. The unit price is ₹10 per unit.
   The carrying cost of inventory is 10% and the ordering cost is ₹5 per order. The economic order lot to be ordered is —
   (a) 100 units
   (b) 800 units
   (c) 200 units
   (d) 400 units.

18. From the following transactions, prepare separately the Stores Ledger Accounts, using the following pricing methods: (i) the FIFO, (ii) the LIFO.
   January 1  Opening balance 100 units @ ₹5 each
   January 5  Received 500 units @ ₹6 each
   January 20  Issued 300 units
   February 5  Issued 200 units
   February 6  Received 600 units @₹5 each
   March 10  Issued 300 units
   March 12  Issued 250 units

19. The following receipts and issues of materials were made during the month of January.
   January 1  Opening stock 80 units @₹1.00 each
   January 7  Received from vendors 40 units @ ₹1.10 each
   January 12  Received from vendors 60 units @ ₹1.20 each
   January 22  Received from vendors 72 units @ ₹1.25 each
   January 4  Issued 60 units
   January 9  Issued 40 units
January 14 Issued 40 units
January 30 Issued 80 units

Prepare the Stores Ledgers maintained under (i) the FIFO, (ii) the LIFO methods.

20 From the following details in respect of a material item for the month of Dec. 2016, Calculate Cost of Material Consumed and the Value of Closing Stock under (i) LIFO; and (ii ) Simple Average Price Methods.

December 2016:
Opening stock (1st Dec.) : 500 units @ ₹ 2. Per unit
Purchases:
5th Dec.: 1,000 units @ ₹ 3 per unit.
8th Dec.: 1,500 units @ ₹ 4 per unit

Issued to Production:
10th Dec.: 1,600 units.

21 A firm is able to obtain quantity discounts on its orders of material as follows:

<table>
<thead>
<tr>
<th>Price per tonne</th>
<th>Tonnes</th>
<th>Price per tonne</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>₹ 6.00</td>
<td>Less than 250</td>
<td>₹ 5.70</td>
<td>2,000 and less than 4000</td>
</tr>
<tr>
<td>₹ 5.90</td>
<td>250 and less than 800</td>
<td>₹ 5.60</td>
<td>4,000</td>
</tr>
<tr>
<td>₹ 5.80</td>
<td>800 and less than 2,000</td>
<td>₹ 5.60</td>
<td>4,000 and over.</td>
</tr>
</tbody>
</table>

The annual demand for the material is 4,000 tonnes. Stock holding costs are 20% of material cost per annum. The delivery cost per order is ₹ 6.
You are required to calculate the best quantity to order.

22 From the following information, calculate economic order quantity and the number of orders to be placed in one quarter of the year for product X:

(i) Quarterly consumption of material 2,000 kg.
(ii) Cost of placing an order ₹ 50
(iii) Cost per unit ₹ 40
(iv) Storage & carrying cost 80% on average inventory

23 Discuss in detail the various methods of Inventory Valuation.

24 Write short notes on:
   a) ABC
   b) JIT
   c) Kaizen

25 What are the advantages and disadvantages of LIFO and FIFO Methods?

26 The annual demand of a particular item of inventory is 10,000 units. Inventory carrying cost is 20% and ordering cost is ₹ 40 per order. The price quoted by the supplier is ₹ 4 per unit. However, the supplier is willing to give discount of 5% for orders of 1500 units or more. Is it worth to avail the discount offer?
27. EXE Limited has received an offer of quantity discounts on its orders of materials as under:

<table>
<thead>
<tr>
<th>Price per tonne Rs.</th>
<th>Tonnes No.s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>Less than 500</td>
</tr>
<tr>
<td>1180</td>
<td>500 and less than 1000</td>
</tr>
<tr>
<td>1160</td>
<td>1000 and less than 2000</td>
</tr>
<tr>
<td>1140</td>
<td>2000 and less than 3000</td>
</tr>
<tr>
<td>1120</td>
<td>3000 and above</td>
</tr>
</tbody>
</table>

The annual requirement for the material is 5000 tonnes. The ordering cost per order is Rs1200 and the stock holding cost is 20% of material cost per annum. You are required to compute the most economical purchase level.

28. The following information is provided by Sunrise Industries for the fortnight of April 2010:

Material Exe: Stock on 1-4-2010, 100 units @Rs 5 per unit

Purchases:
- 5-4-2010 300 units @ Rs 6
- 8-4-2010 500 units @Rs 7
- 12-4-2010 600 units @ Rs 8

Issues:
- 6-4-2010 250 units
- 10-4-2010 400 units
- 14-4-2010 500 units

You are required to calculate using FIFO and LIFO methods of pricing:
- Value of materials consumed during the period
- Value of stock of materials (closing stock) as on 15-4-2010

29. Explain the concept of ABC Analysis as a technique of inventory control.

30. Distinguish between reorder level and reorder quantity.

31. Cost may be classified in a variety of ways according to their names and information needs of management.” Explain and discuss this statement giving examples of classification required for different purposes.

32. AM Enterprises produces a product ‘Red’ using two components X and Y. Each unit of ‘Red’ requires 0.4 kg of X and 0.6 kg of Y. Weekly production varies from 350 units to 450 units averaging 400 units. Delivery period for both the components is 1 to 3 weeks. The economic order quantity for X is 600 kg and for Y is 1000 kg. Calculate:
   i) Reorder level of X
   ii) Maximum level of X
   iii) Minimum level of Y

33. Oil India is a bulk distributor of high-octane petrol. A periodic inventory of petrol on hand is taken when the books are closed at the end of each month. Following summary of information is available for the month June, 2014:

Sales ₹9,45,000; General administrative cost ₹25,000; Opening stock 1,00,000 litres @ ₹3 per litre ₹3,00,000.

Purchases (including freight in)
- June 1 2,00,000 litres @ ₹2.85 per litre
June 30 1,00,000 litres @ ₹3.03 per litre
Closing stock on June 30; 1,30,000 litres

Compute the following data by first in and first out, weighted average and last in first out method of inventory costing:
a) Value of inventory on June 30
b) Amount of the cost of goods sold for June
c) Profit or loss for June

“Cost may be classified in a variety of ways according to their nature and the information needs of management.” Explain and discuss this statement giving examples of classifications required for different purposes.

From the data given below, answer the following:
a) What is the simple average price of the four week’s receipts of material A?
b) What is the weighted average price of the four weeks’ receipts of material B?
c) What is the value of the balance of material A, in stock at the close of the fourth week if issues are priced on a LIFO basis?
d) What is the value of the fourth week’s issue of material B, if they are priced on a FIFO basis?

<table>
<thead>
<tr>
<th>Week</th>
<th>Raw Material Received</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A Kg.    Rs.</td>
<td>B Kg.    Rs.</td>
</tr>
<tr>
<td>I</td>
<td>500      2000</td>
<td>2500      3380</td>
</tr>
<tr>
<td>II</td>
<td>600      2520</td>
<td>2800      3920</td>
</tr>
<tr>
<td>III</td>
<td>400      1760</td>
<td>1500      2100</td>
</tr>
<tr>
<td>IV</td>
<td>500      1920</td>
<td>3200      4800</td>
</tr>
</tbody>
</table>

Opening Stocks:
A- 400 kg at Rs. 1440
B - 4000 kg at Rs. 5800

UNIT - II

1 MULTIPLE CHOICE QUESTIONS:

1 The total earnings of a worker are same under the both Halsey and Rowan Plans when time saved is:
   A. 50% of the standard time
   B. Less than 50% of the standard time
   C. More than 50% of the standard time
   D. None of these
   ANSWER: A

2 Time-wage system:
   A. Guarantees a minimum wage to the workers.
   B. Makes distinction between efficient and inefficient workers.
   C. Lowers the cost of product per unit.
D. Increases the cost of product per unit
ANSWER: A

3 Taylor’s differential plan provides for:
A. Two wage rates.
B. Three wage rates.
C. More than three wage rates.
D. Less than two wage rates.
ANSWER: B

4 The _________ workers are temporary workers who are not on the regular payroll of the Factory.
A. Out- workers.
B. Regular workers.
C. Irregular workers.
D. Casual workers.
ANSWER: D

5 _________ are the workers who work outside the factory premises on behalf of the Undertaking.
A. Out- workers.
B. Regular workers.
C. Irregular workers.
D. Casual workers.
ANSWER: A

6 Piece -wage system:
A. Benefits the employer only.
B. Recognises individual efficiency.
C. Is favoured by trade unions.
D. None of the above.
ANSWER: B

7 _________ time represents time lost by workers who are paid on time basis.
A. Overtime
B. Idle time
C. In time
D. All of the above
ANSWER: B

8 Under _________ system , workers are paid according to the time for which they work.
A. Time Rate system
B. Piece Rate System
C. Group bonus Plan
D. All of the above
ANSWER: A
9. Under ___________ system, wages are paid according to the quantity of work done.
   A. Time Rate system
   B. Piece Rate System
   C. Group bonus Plan
   D. All of the above
   ANSWER: B

10. Total earnings= Time rate x Time taken + 50% of [Time saved x Time rate] is:
   A. Halsey Premium Plan
   B. Halsey Weir Plan
   C. Rowan Plan
   D. Taylor’s Differential Piece Rate System
   ANSWER: A

11. Earnings = (Time taken x Time rate) + Bonus is used under which plan?
   A. Halsey Premium Plan
   B. Halsey Weir Plan
   C. Rowan Plan
   D. Taylor’s Differential Piece Rate System
   ANSWER: C

12. In ___________ plan, standard time of each job is determined in minutes.
   A. Bedaux Plan
   B. Emerson’s Efficiency Plan
   C. Gantt’s Task
   D. Merrick’s differential Piece rate System
   ANSWER: A

13. __________ plan lays down three rates.
   A. Bedaux Plan
   B. Emerson’s Efficiency Plan
   C. Gantt’s Task
   D. Merrick’s differential Piece Rate System
   ANSWER: D

14. __________ plan is a combination of time rate, differential piece rate and bonus.
   A. Bedaux Plan
   B. Emerson’s Efficiency Plan
   C. Gantt’s Task & Bonus Plan
   D. Merrick’s differential Piece Rate System
   ANSWER: C

15. A standard time for each job is set very carefully after time and motion studies in:
   A. Bedaux Plan
   B. Emerson’s Efficiency Plan
C. Gantt’s Task & Bonus Plan
D. Taylor’s differential Piece Rate System
ANSWER: D

16 ________ do not increase or decrease when the volume of production changes.
A. Fixed costs
B. Variable costs
C. Semi-variable cost
D. Discretionary cost
ANSWER: A

17 __________ costs tend to vary in direct proportion to the volume of output.
A. Fixed costs
B. Variable costs
C. Semi-variable cost
D. Discretionary cost
ANSWER: B

18 ______ are those costs which are not necessary for production and are incurred even if there is no production.
A. Fixed costs
B. Variable costs
C. Period costs
D. Discretionary cost
ANSWER: C

19 A __________ cost is an expenditure made in the past that cannot be changed and over which management no longer has control.
A. Fixed costs
B. Variable costs
C. Shut Down cost
D. Sunk cost
ANSWER: D

20 Packing material; stationary used in sales office, cost of samples, price list all are examples Of:
A. Selling & distribution overheads
B. Office & administrative overheads
C. Production overheads
D. A & B
ANSWER: A

21 In __________ costing costs are compiled process-wise and cost per unit is the average Cost.
A. Job costing
B. Process costing  
C. Batch costing  
D. Contract costing  
ANSWER: B

22 The amount of loss which cannot be avoided because of the nature of material or process is_____.  
A. Normal Process Loss  
B. Abnormal Process Loss  
C. Seasonal Loss  
D. Standard Loss  
ANSWER: A

23 The type of process loss that should not affect the cost of inventory value is:  
A. Abnormal Loss  
B. Normal Loss  
C. Seasonal Loss  
D. Standard Loss  
ANSWER: A

24 The stage where joint products are separated from each other is known as:  
A. Break-even point  
B. Angle of Incidence  
C. Split-off point  
D. Composite point  
ANSWER: C

25 Abnormal loss is charged to:  
A. Process account  
B. Costing Profit & Loss Account  
C. Normal Loss account  
D. Normal Account  
ANSWER: B

26 According to Taylor’s Differential plan, the worker is paid according to his?  
A. Degree of Efficiency  
B. Degree of Understanding  
C. Degree of Flexibility  
D. Degree of Loyalty  
ANSWER: A

27 Under the Halsey wage plan, a worker is paid?  
A. At a time rate higher than the usual rate  
B. According to his efficiency  
C. At a double rate for overtime  
D. Normal wages plus bonus
ANSWER: D

28 Standard output is 100 units per day of 8 hours and the piece rates are 20 paise per unit, under Taylor’s differential piece rate system, what will be amount of wages if a worker produces 95 units in a day?
A. Rs.14.00
B. Rs.14.25
C. Rs.15.20
D. Rs.19.00
ANSWER: C

29 Comparing Rowan and Halsey Premium plans, it is seen that when the time saved?
A. Rowan plan allows more wages to a worker than Halsey plan
B. Rowan plan allows fewer wages to a worker than Halsey plan
C. Rowan and Halsey plan allow equal wages to a worker
D. None of above
ANSWER: D

30 When standard output is 10 units per hour and actual output is 12 units per hour, the efficiency is?
A. 80%
B. 100%
C. 110%
D. 120%
ANSWER: D

31 Given that for a job standard time is 8 hours, actual time taken is 6 hours and the time rate is Rs.2 per hour. What is the total wages, under Halsey Premium Plan?
A. Rs.18
B. Rs.16
C. Rs.14
D. Rs.12
ANSWER: C

32 In which of the following incentive plans of wage payment, wage on time basis are not guaranteed?
A. Halsey plan
B. Rowan plan
C. Taylor’s differential piece rate system
D. Halsey wire Plan
ANSWER: C

33 Which of the following methods of wage payment is most suitable where quality and accuracy of work is of primary importance?
A. Rowan plan
B. Time rate system
C. Differential piece work system  
D. Halsey premium system  
ANSWER: A

34 Which of the following is / are time-based incentive wage plan?  
A. Halsey Premium Plan  
B. Halsey Weir Premium Plan  
C. Rowan Premium Plan  
D. All of the given options  
ANSWER: D

35 A worker is paid Rs. 0.50 per unit and he produces 18 units in 7 hours. Keeping in view the straight-piece rate system, the total wages of the worker would be?  
A. $18 \times 7 \times 0.50 = Rs. 63$  
B. $18 \times 0.50 = Rs. 9$  
C. $18 \times 7 = Rs. 126$  
D. $7 \times 0.5 = Rs. 3.5$  
ANSWER: B

36 The wages paid to maintenance department workers who do repair work principally for production departments but also on the vehicles in the distribution department should be charged as  
A. Service costs  
B. Distribution costs  
C. General costs.  
D. Production costs  
ANSWER: A

37 Which of the following costs of management is likely to have least control?  
A. Machine breakdown cost  
B. Wages cost  
C. Advertising cost.  
D. Buildings insurance cost  
ANSWER: D

38 Which of the following costs are most likely to have a cost behavior pattern described as . . . a fixed cost up to an activity level of 1,000 units with a variable cost thereafter which decreases from 10 P to 8 P per unit at 2,000 units?  
A. Photocopying equipment with a fixed hire charge plus a reducing charge per unit.  
B. Wages payment which is fixed for a minimum output quantity after which a bonus per unit is paid which reduces above a certain output level to a smaller bonus per unit.  
C. Royalty payment per unit which reduces after 2,000 units.  
D. Material cost of 12 P per unit for the first 1,000 units followed by 10 P per unit up to 2,000 units and 8 P per unit thereafter.  
ANSWER: B
39. Which of the following is most likely to be an allocated production overhead cost to the finishing cost center?
   A. Factory rates.
   B. Salary of the finishing cost center supervisor.
   C. Power used on finishing cost center machines.
   D. Salary of the production manager.
   ANSWER: B

40. Which of the following is a valid classification of the salary paid to the foreman in charge of the packing department?
   A. Indirect departmental cost
   B. Direct product cost
   C. Direct departmental cost
   D. Service department cost.
   ANSWER: C

41. Which of the following methods of charging service cost centers will be compatible with control of the efficiency of the service within the service cost center?
   A. No charge to users.
   B. Charges users with total actual cost incurred.
   C. Charges users with total (full) absorption cost.
   D. Charges users with the opportunity cost of the service.
   ANSWER: D

42. Non-production overheads are usually omitted from stock valuation for the following reason:
   A. They are outside the control of production management.
   B. They are fixed period costs.
   C. They are incurred after the stock has been brought to its present location and condition.
   D. They cannot be identified with individual products.
   ANSWER: C

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   A. They are outside the control of production management.
   B. They are fixed period costs.
   C. They are incurred after the stock has been brought to its present location and condition.
   D. They cannot be identified with individual products.
   ANSWER: C
44. If the overhead to be absorbed was the foreman’s salary, the most likely appropriate basis for absorption would be:
   A. Weight of material
   B. Direct labor hours
   C. Selling price
   D. Prime cost.
   ANSWER: B

45. Absorption of production overhead cost in unit cost on a marginal cost basis is unacceptable.
   A. As a cost control mechanism.
   B. As a decision-making aid.
   C. For stock valuation in compliance with SSAPG.
   D. For profit measurement in monthly management accounts.
   ANSWER: C

II SHORT ANSWER TYPE QUESTIONS:

1. Distinguish between:
   a) Work Study and Method Study
   b) Casual Workers and Out-workers

2. What is Idle Time? Give reasons for idle time. How do you treat idle time in cost accounts?

3. Distinguish between normal and abnormal idle time.

4. Discuss the different methods of wage payment to workers.

5. Explain Halsey System of paying incentive wages to workers.

6. Distinguish between:
   a) Piece rate and time rate
   b) Profit sharing and Co-partnership

7. What is a group bonus? What are the advantages over individual bonus?


9. Explain the following methods of wage payment:
   a) Taylor’s Different Piece rate System
   b) Rowan Scheme
   c) Emerson’s Efficiency Plan

10. Define Overhead. Explain various classifications of overhead.

11. Explain with illustration the classification of ‘Fixed’, ‘Semi-Fixed’ and ‘Variable’ expenses.

12. Explain the various methods of segregating fixed and variable overhead costs.

13. Distinguish between:
   a) Cost classification and cost allocation
   b) Cost apportionment and overhead absorption

14. Distinguish between allocation, apportionment and absorption of overhead.

15. How would you apportion the following expenses among various departments?
a) Rent
b) Supervision
c) Repair
d) Electric charges
e) Motive Power
f) Depreciation

16 What are the basic differences between job order and process cost systems?

17 How you will deal with:
   i) Normal wastage
   ii) Abnormal wastage
   iii) Abnormal effectives in process cost accounts?

18 From the following information, calculate the bonus and earnings under Emerson Efficiency Bonus Plan:
   Standard output in 12 hours 48
   Actual output in 12 hours 42
   Time rate ₹7.50 per hour
   If the actual output is 60 units, what will be amount of bonus and earnings?

   CMA, Executive, pg. 133

19 A workman’s wages for a guaranteed 44-hour week is ₹ 7.50 per hour. The estimated time To produce one article is 30 minutes and under an incentive plan, the time allowed is increased by 20%. During a week, a worker produced 100 articles. Calculate the wages under each of the following methods: a) Time rate b) Rowan System, and c) Halsey System.

20 A worker produced 200 units in a week’s time. The guaranteed weekly wage payment for 45 hours is ₹ 81. The expected time to produce one unit is 15 minutes which is raised further by 20% under the incentive scheme. What will be earnings per hour of that worker under Halsey (50% sharing) and Rowan bonus schemes?

21 Calculate the total earnings of the workers under Halsey and Rowan Plans:
   Standard time 10 hrs.
   Hourly Rate ₹ 2
   Time taken 6 hrs.

22 The following information is given in respect of process A.
   Material 1000 kg.@ ₹ 6 per kg.
   Labor ₹ 5000
   Direct Expenses ₹ 1000
   Indirect expenses allocated to Process A ₹ 1,000.
   Normal Wastage 10% of input.
   Prepare Process A Account when:
   a) Scrap value of normal loss is nil.
   b) Scrap arising out of normal has a sale value of ₹ 1 per unit.

23 From the following information compute Machine-Hour Rate in respect of machine for the month of January 2012:
   Cost of machine ₹90,000
   Other-Charges freight and installation ₹ 10,000
   Effective Working Life 10 years
Working hours
Repair charges
Power consumed by the machine
Lubricating oil at ₹ 2 per day of 8 hours
Consumable stores at ₹ 10 per day of 8 hours
Wages of operator at ₹ 4 per day of 8 hours

A factory has three production departments A, B and C and two service departments X and Y. The overhead costs of the different departments incurred during March, 2012 are as follows:

<table>
<thead>
<tr>
<th>Departments</th>
<th>Costs (in ₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10,000</td>
</tr>
<tr>
<td>B</td>
<td>8,000</td>
</tr>
<tr>
<td>C</td>
<td>6,000</td>
</tr>
<tr>
<td>X</td>
<td>5,000</td>
</tr>
<tr>
<td>Y</td>
<td>3,000</td>
</tr>
</tbody>
</table>

The costs of Departments X has to be charged in the ratio of 2:2:1 and those of departments Y equally to Departments A, B and C respectively. Find out the overheads costs of each of the production departments.

Cost centre in a factory furnishes the following information:
1) Working hours per week: 30 hours.
2) Number of identical machines installed in the centre: 5.
3) Budgeted Factory Overheads for a 4-weekly period for the Cost Centre: ₹ 6,000.
4) Direct Labour Cost for a 4 weekly period for the Cost Centre: ₹ 15,000.

You are required to calculate Factory Overhead Absorption Rate based on:
1) Machine Hours.
2) Labour Cost.

Explain idle time and overtime in detail.
Explain overheads on the basis of functionality and on the basis of elements.

The following particulars relate to a new machine purchased:

<table>
<thead>
<tr>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price of the machine</td>
</tr>
<tr>
<td>Installation expenses</td>
</tr>
<tr>
<td>Rent per quarter</td>
</tr>
<tr>
<td>General lighting for the total area</td>
</tr>
<tr>
<td>Foreman’s salary</td>
</tr>
<tr>
<td>Insurance premium for the machine</td>
</tr>
<tr>
<td>Estimated repairs for the machine</td>
</tr>
<tr>
<td>Estimated consumable stores</td>
</tr>
<tr>
<td>Power-2 units per hour at ₹50 per 100 units</td>
</tr>
</tbody>
</table>

Estimated life of the machine is 10 years and the estimated value at the end of the 10th year is ₹ 1 lakh. The machine is expected to run 20,000 hours in its lifetime. The machine occupies 25% of the total area. The foreman devotes 1/6 of his time for the machine. Calculate the machine hour rate for the machine.

Explain Taylor’s method for calculation of Labour remuneration.
Explain idle Time and Overtime. Distinguish between them.
31. Name and briefly explain the methods of labour turnover.
32. What is variable overheads? Give two examples.
33. How do you calculate bonus under:
   a) Halsey Plan?
   b) Rowan Plan?
34. In factory where piece work system is followed with guaranteed minimum wages of Rs.12 (for 8 hrs) incentive payments are according to rowan bonus scheme. The standard time per unit in 10 minutes. If a five day week of 40 working hour the actual production is 300 units, what will be the total earnings of the worker?
35. In a mill number of employees at the beginning and end of periods were 2,486 and 2,334 respectively. During the period,320 workers left the mill while 168 persons joined the service. What is labor turn over rate per flux method?

III LONG ANSWER TYPE QUESTIONS:

1. Define labour. What is direct labour? What is indirect labour? Give examples. Explain how they are treated in cost accounts.
2. Explain the different methods of time recording for workers.
3. Discuss the various incentive schemes, their merits and demerits.
4. What is idle time? Give its treatment in cost accounts.
5. Write short notes on:
   (a) Labour turnover
   (b) Idle time
   (c) Overtime
   (d) Casual workers
   (e) Site workers.
6. State the distinction between the two terms in each of the following, giving examples:
   (a) Cost allocation and cost apportionment.
   (b) Direct cost and indirect cost.
   (c) Fixed cost and variable cost.
   (d) Indirect expenses and overheads.
7. What are overheads? How should overheads be classified? To what extent will you include overhead charges in your valuation of (a) work-in-progress, and (b) finished goods?
8. Distinguish between allocation, apportionment and absorption in connection with factory overhead expenses.
9. Discuss the difference between allocation and apportionment of overheads.
11. Discuss the objectives of time keeping and time booking.
12. Distinguish between Job evaluation and merit ranking.
13. Explain the concept of normal overhead and normal overhead rates.
14. What is meant by absorption of overheads? Explain briefly the different methods of absorption of overheads.
15. Why do we employ pre-determined overhead rate of absorption? Under what circumstances is direct labour cost percentage method to be employed?
16. Explain with examples the difference between:
a) Cost Apportionment and Cost Absorption
b) Actual and pre-determined overhead rates.

17 A company is having three production departments X, Y and Z and two service departments - boilerhouse and pump-room. The boiler-house has to depend upon the pump-room for supply of water and pump-room in its turn is dependent on the boiler-house for supply of steam-power for driving the pump. The expenses incurred by the production departments are: X - ₹6,00,000; Y - ₹5,25,000; and Z - ₹3,75,000. The expenses for boiler-house are ₹1,75,500 and pump-room are ₹2,25,000.

The expenses of the boiler-house and pump-room are apportioned to the production departments on following basis:

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>Boiler House</th>
<th>Pump Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Y</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Z</td>
<td>30%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Show clearly as to how the expenses of boiler-house and pump-room would be apportioned to X Y and Z departments?

18 In a shop work is done by means of five machines of exactly similar type and specification:

1) Rent & rates (proportional to the floor space occupied) for the shop 4,800
2) Depreciation on each machine 500
3) Repairs and maintenance for the five machines 1,000
4) Power consumed (as per meter) @5 Paise per unit for the shop 3,000
5) Electricity charges for lights in the shop 540
6) Attendants: there are two attendants for the five machines and they are each paid ₹. 60 per month.
7) Supervision: for the five machines in the shop there is one supervisor whose Emoluments are ₹. 250 p.m.
8) Sundry supplies such as lubricants, cotton waste , etc. for the shop 450
9) Hire-purchase instalments payable for the machine 1,200

The machine uses 10 units of power per hour.

**Calculate the machine hour rate for machine for the year.**

19 Standard time for completion of a task is 20 hours and per hour rate is ₹ 1. In addition for every hour worked, there is a dearness allowance at the rate of paise 30.

Time taken by a worker is 15 hours.

Calculate his earnings under:
1) Time wage system
2) Piece wage system
3) Halsey Plan
4) Rowan Plan

20 Compute the total earnings and the rate earned per hour in respect of three workers under Halsey and Rowan schemes. (Bonus under Halsey Schemes is 50% of time saved).

Standard time 20 hours.

Hourly rate of wages ₹ 2.
Actual time taken 16 hours; 10 hours; 8 hours.
Also give your comments.

21 XYZ Co. Ltd. Has three production departments. A, B and C and two service Depts. D and E.
The following figures are extracted from the records of the company:

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent &amp; rates</td>
<td>5000</td>
<td>600</td>
</tr>
<tr>
<td>Indirect wages</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Depreciation of machinery</td>
<td>10,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

The following details are further available:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor space(Sq. ft.)</td>
<td>20,000</td>
<td>4,000</td>
<td>5,000</td>
<td>6,000</td>
<td>4,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Light points</td>
<td>120</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Direct wages(Rs.)</td>
<td>10,000</td>
<td>3,000</td>
<td>2,000</td>
<td>3,000</td>
<td>1,500</td>
<td>500</td>
</tr>
<tr>
<td>H.P. of machines</td>
<td>150</td>
<td>60</td>
<td>30</td>
<td>50</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Value of Machinery(Rs.)</td>
<td>2,50000</td>
<td>60,000</td>
<td>80,000</td>
<td>1,000,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Apportion the costs to various departments on the most equitable basis and prepare overhead Distribution Summary.

Note: it should be noted that the direct wages have been charged only for service departments because for service departments, all costs are indirect.

22 The following particulars relate to a new machine purchased:

<table>
<thead>
<tr>
<th></th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price of machine</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Installation expenses</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Rent per quarter</td>
<td>15,000</td>
</tr>
<tr>
<td>General lighting for the total area</td>
<td>100 p.m.</td>
</tr>
<tr>
<td>Foreman’s salary</td>
<td>30,000 p.a.</td>
</tr>
<tr>
<td>Insurance premium for the machine</td>
<td>3000 p.a.</td>
</tr>
<tr>
<td>Estimated repairs for the machine</td>
<td>5000 p.a.</td>
</tr>
<tr>
<td>Estimated consumables stores</td>
<td>4000 p.a.</td>
</tr>
</tbody>
</table>

Power-2 units per hour at ₹ 50 per 100 units.

Estimated life of the machine is 10 years and the estimated value at the end of the 10th year is ₹1 lakh. The machine is expected to run 20,000 hours in its life time. The machine occupies 25% of the total area. The foreman devotes 1/6 of his time for the machine.

Calculate the machine hour rate for the machine.

23 Discuss the concept of collection, classification and Codification of overheads.

24 What are the main sources of Overhead expenses? State with examples the procedure for such collection from these sources.

25 Explain the nature of administrative overheads. How they are apportioned?

26 A company has budgeted ₹5,00,000 for variable overheads and ₹8,00,000 for fixed overheads for the year. The overheads are recovered on the basis of the machine hours.

The company has budgeted for 1,00,000 machine hours for the year. During the year, the company used 95000 machine hours for the actual output. Actual costs incurred for the fixed and variable manufacturing overheads were ₹8,00,000 & ₹4,70,000 respectively.

You are required to compute-

i. The over or under recovered variable manufacturing overhead amount
ii. The over or under recovered fixed manufacturing overhead amount
iii. The over or under recovered total manufacturing overhead amount
27 Explain Emerson’s plan for labour remuneration in detail.
28 Explain fixed cost, variable cost, semi variable cost and step costs in detail.
29 Explain the remuneration/payroll system in place for labour.
30 Compute total earnings of a worker under Halsey Plan and Rowan Plan.
   Standard fixed time = 20 hours
   Time taken = 16 hours
   Hourly rate = Rs.2 per hour
31 From the following particulars work out the earnings for the week of a worker under:
   a) Straight Piece Rate System
   b) Differential Piece Rate System
   c) Halsey Premium System
   d) Rowan System
   Number of working hours per week ................................................. 48
   Wages per hour ............................................................................. ₹3.75
   Rate per piece ................................................................................ ₹1.50
   Normal time per piece ................................................................. 20 minutes
   Normal output per week ............................................................... 120 pieces
   Actual output per week ............................................................... 150 pieces
   Differential piece rate: 80% of piece rate when output is below standard and 120% when above standard.

32 Strongman Ltd. has three production departments P1, P2 and P3 and two service departments S1 and S2. Following particulars are available for the month of March 2014 concerning the organisation:

   Rent ₹15,000; Municipal Taxes ₹5,000; Electricity ₹2,400; Indirect wages ₹6,000; Power ₹6,000; Depreciation on machinery ₹40,000; Canteen expenses ₹30,000; and other labour related costs ₹10,000.

   Following further details are also available:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor space (Sq. mts.)</td>
<td>5,000</td>
<td>1,000</td>
<td>1,250</td>
<td>1,500</td>
<td>1,000</td>
<td>250</td>
</tr>
<tr>
<td>Light points(no.)</td>
<td>240</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Direct wages(₹)</td>
<td>40,000</td>
<td>12,000</td>
<td>8,000</td>
<td>12,000</td>
<td>6,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Horse power of machine (no.)</td>
<td>150</td>
<td>60</td>
<td>30</td>
<td>50</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Cost of machine (₹)</td>
<td>2,00,000</td>
<td>48,000</td>
<td>64,000</td>
<td>80,000</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Working hours</td>
<td>2,335</td>
<td>1,510</td>
<td>1,525</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   The expenses of service departments are to be allocated in the following manner:

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>-</td>
<td>10%</td>
</tr>
<tr>
<td>S2</td>
<td>40%</td>
<td>20%</td>
<td>30%</td>
<td>10%</td>
<td>-</td>
</tr>
</tbody>
</table>

   You are required to calculate the overhead absorption rate per hour in respect of the three production departments.
33. A worker completes a job in a certain number of hours. The standard time allowed for the job is 12 hours and the hourly rate of wages is Rs.5 per hour. The worker earns, at the rate of 50%, a bonus of Rs.7.5 under Halsey Plan. Ascertain the total earnings of the worker under Rowan Premium Plan. Also calculate the effective rate of earning per hour.

34. Calculate Machine Hour Rate from the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Machine</td>
<td>Rs. 1,30,000</td>
</tr>
<tr>
<td>Installation Charges</td>
<td>Rs. 20,000</td>
</tr>
<tr>
<td>Working Life</td>
<td>10 years</td>
</tr>
<tr>
<td>Working hours</td>
<td>1,500 per year</td>
</tr>
</tbody>
</table>

Repairing charges 40% of Depreciation
Power 10 units per hour @ Rs. 0.10 per unit
Lubricating oil Rs.6 per day for 8 hours
Consumable store Rs. 10 per day of 8 hours
Wages of Operator Rs. 4 per day
Machine Insurance 40% of Depreciation

35. What do you mean by absorbed overhead? Under what circumstances will a difference arise between absorbed overhead and actual overhead? How will you dispose of the balance?

UNIT-III

I MULTIPLE CHOICE QUESTIONS:

1. In automobile industry cost unit is
   A. Number
   B. Automobile quality
   C. Number of automobile industry
   D. Either (a) or (c)
   ANSWER: B

2. .......... costing is suitable for mines, quarries, cement works etc.
   A. Process
   B. Contract
   C. Batch
   D. Operation
   ANSWER: D

3. .......... is an extension of job costing.
   A. Process costing
   B. Batch costing
C. Contract costing
D. Operation costing
E. None of these
ANSWER: B

4 When job is very big and spread over long periods of time the method of costing adopted is
A. Process
B. Job
C. Contract
D. Operation
E. Batch
ANSWER: C

5 Continuous costing is also called
A. Operation costing
B. Process costing
C. Batch costing
D. Contract costing
E. None of these
ANSWER: B

6 Cost accounting is based on .......... figures.
A. Approximated
B. Estimated
C. Historical
D. Either (a) or (c)
E. None of these
ANSWER: B

7 ..........costing is used in transport undertaking.
A. Operating
B. Standard
C. marginal
D. Absorption
E. Service
ANSWER: E

8 In .......... costing the cost of a group of products is ascertained.
A. Process
B. Job
C. Batch
D. Service
E. Marginal
ANSWER: C
9. The total of all direct expenses is known as
   A. Total cost
   B. Overhead
   C. Prime cost
   D. Work cost
   E. None of these
   ANSWER: C

10. An opportunity cost is a
    A. Direct expense
    B. Indirect expense
    C. Variable expense
    D. Fixed expense
    E. Semi-variable expense
    ANSWER: A

11. In cost Accounting, abnormal loss is charged to:
    A. Factory overhead control account
    B. Work in process account
    C. Income Statement
    D. Entire production
    ANSWER: B

12. The combination of direct material and direct labor is:
    A. Total production Cost
    B. Prime Cost
    C. Conversion Cost
    D. Total manufacturing Cost
    ANSWER: B

13. Prime cost + Factory overhead cost is:
    A. Conversion cost.
    B. Production cost.
    C. Total cost.
    D. None of given option.
    ANSWER: B

14. Abnormal loss should be transferred to
    A. Abnormal loss account
    B. Costing profit and loss a/c
    C. Cash account
    ANSWER: B

15. The unavoidable loss of material is known as
    A. Normal loss
    B. Abnormal loss
C. Waste
ANSWER: A

16 Loss due to fire, theft, are ......................
A. Normal loss
B. Abnormal loss
C. Scrap
ANSWER: B

17 The cost of ............. is not included in the cost of production
A. Normal loss
B. Abnormal loss
C. Scrap
ANSWER: B

18 Prime cost can be also called ......................
A. Indirect cost
B. Direct cost
C. Fixed
ANSWER: B

19 Element of cost refers to .................
A. Component cost
B. Components of cost
C. Prime cost
ANSWER: B

20 Cost of material that can be identified is called ............... Cost
A. Direct
B. Indirect
C. Variable
ANSWER: A

21 ............. in the aggregate of indirect material, indirect labour, and indirect expense
A. Prime cost
B. Factory cost
C. Overhead
ANSWER: C

22 The value of benefit sacrificed in favor of an alternative course of action as known as
A. Variable
B. Fixed cost
C. Opportunity cost
ANSWER: C
23 Loss of time due to avoidable reason is known as
   A. Normal idle time
   B. Abnormal idle time
   C. Overtime
   ANSWER: A

24 Time lost in the course of normal activity is known as
   A. Idle time
   B. Abnormal idle time
   C. Over time
   D. Normal idle time
   ANSWER: D

25 Packaging charges is _____________
   A. Factory Overhead
   B. Administrative overheads
   C. Selling overheads
   ANSWER: C

26 Which of the following System applies when standardized goods are produced under a series of inter-connected operations?
   A. Job order costing
   B. Process costing
   C. Standard costing
   D. None of the above
   ANSWER: B

27 Total costs incur in a production process, is divided by total number of output units, to calculate the
   A. cost of indirect labor
   B. cost of direct labor
   C. cost of direct material
   D. unit costs
   ANSWER: D

28 If beginning work in process equivalent units are 2500 units, work done in current period equivalent units are 3800 units and ending work in process equivalent units are 5000, then complete equivalent units in current period are
   A. 1800 units
   B. 1500 units
   C. 1300 units
   D. 1500 units
   ANSWER: C

29 A unit cost calculated in costing system, by assigning total costs incurred to many similar units is categorized as
A. accounting period costing system
B. process costing system
C. job costing system
D. none of above
ANSWER: B

30 If beginning work in process equivalent units are 2500 units, work done in current period equivalent units are 3800 units and units completed in current period are 4000, then ending work in process equivalent units will be
A. 1800 units
B. 2300 units
C. 10300 units
D. 1500 units
ANSWER: C

31 Cost estimation include(s) the following expenditure(s)
A. pattern making
B. tool making
C. selling expenses
D. all of the above
ANSWER: D

32 To calculate the probable cost of the product, knowledge of following factors involves
A. Production time required
B. Use of previous estimates of comparable parts
C. Effect of change in facilities on costing rates
D. All of the above
ANSWER: D

33 The following is also known as overhead costs or on costs.
A. Cost of direct labour
B. Cost of indirect labour
C. Direct expenses
D. Indirect expenses
ANSWER: D

34 Cost of preparing drawings for the manufacture of a particular product is
A. Cost of direct labour
B. Cost of indirect labour
C. Direct expenses
D. Indirect expenses
ANSWER: C

35 The following is cost of indirect materials
A. Lubricating oil
B. Octroi
C. Import duties  
D. Insurance  
ANSWER: A

36. The monetary value attributed to normal losses in a process should be:  
A. A share of the process cost according to the stage of completion of the losses.  
B. A nil value with no other monetary adjustment under any circumstances.  
C. A full share of process cost on the same as good output.  
D. A nil share of process costs which have been reduced by the scrap value of the normal loss.  
ANSWER: D

37. Details for the past month of a continuous process are:  
A. Opening W.I.P. (400 units) (60% complete)  
B. Closing W.I.P. (600 units) (20% complete)  
C. Unit started 1,000  
D. Unit finished 800  
ANSWER: B

38. An abnormal gain in a process occurs in which of the following situations?  
A. When actual losses are greater than the normal loss level.  
B. When costs are reduced through increased machine speed.  
C. When actual losses are less than the normal level.  
D. When the process output is greater than planned.  
ANSWER: C

39. Where process scrap is recycled for use in conjunction with new material as well as being so externally, which of the following is most likely to be the value at which it is debited to the process?  
A. At the same price as it sold externally.  
B. At the cost of normal losses.  
C. At the cost attached to abnormal losses.  
D. Nil value.  
ANSWER: A

40. Which of the following is the best explanation of the relevance of equivalent production units in process costing?  
A. A means of equalising production charged into stock each period.  
B. The conversion partly completed units into an equivalent number of completed units in order that costs may be shared on an equitable basis.  
C. The expression of losses in terms of an equivalent number of units of good production in order that their value may be calculated.  
D. A means by which the output achieved may be compared with the equivalent quantity budgeted for the period under review.  
ANSWER: B
41. Purchased materials are added in the second department of a three department process, this order does not increase the number of units produced in the second department and would:
   A. Not change the amount transferred to the next department.
   B. Decrease total work in process inventory.
   C. Increase the factory overhead portion of the ending work-in-process inventory.
   D. Increase total unit cost.
   ANSWER: D

42. The physical flow of units into and out of departments is shown on the:
   A. Quantities schedule.
   B. Equivalent production schedule.
   C. Cost of account for schedule.
   D. Cost of Accounted for schedule.
   ANSWER: B

43. Purchased materials are added in the second department of a three-department process; this increases the number of units produced in the second department and would always:
   A. Change the direct labor cost percentage in the ending work-in-process inventory.
   B. Cause no adjustment to the unit cost transferred in from the first department.
   C. Increase total units costs.
   D. Decrease total ending work-in-process inventory.
   ANSWER: B

44. An equivalent unit of material or conversion cost is equal to:
   A. The amount of material conversion cost necessary to complete one unit of production.
   B. A unit of work-in-process inventory.
   C. The amount of material or conversion cost necessary to start a unit of production into work in process inventory.
   D. Fifty percent of material or conversion cost of a unit to finished goods inventory (assuming a linear production pattern).
   ANSWER: A

45. If beginning work in process equivalent units are 2500 units, work done in current period equivalent units are 3800 units and ending work in process equivalent units are 5000, then complete equivalent units in current period are
   A. 1800 units
   B. 1500 units
   C. 1300 units
   D. 1500 units
   ANSWER: C
II SHORT ANSWER TYPE QUESTIONS:

1. Explain the treatment of stocks in cost sheet.
2. Write short notes on:
   a) Historical cost.
   b) Estimated cost.
3. Discuss the components of prime cost.
4. What is the importance of cost sheet.
5. What is meant by cost sheet? Explain the importance of Cost Sheet.
6. Define various components of total cost.
7. Give a list of items that are excluded from cost sheet.
8. What is the treatment of scrap in cost sheet?
10. State any three methods of classifications of cost.
11. What are selling overheads? How these differ from distribution overheads?
12. What is works cost? How is it arrived at?
13. What is a cost sheet?
14. What are the three elements of cost?
15. Give examples of selling overheads.
16. Give a list of items that appear on debit side of Process A/C.
17. Write short note on process losses.
18. Write short notes on:
    a) Defectives
    b) Spoilage
20. What are the merits and demerits of process costing?
21. Compute the cost of material consumed from the following data:
    Opening stock of raw material ₹9,000
    Purchases of raw material ₹1,27,000
    Closing stock of raw material ₹12,000
22. Compute Prime cost from the data given below:
    Direct Material ₹1,80,000
    Expenses on purchases 20,000
    Rent of special machine taken on hire for production 40,000
    Productive wages 65,000
23. From the following information, calculate the value of goods sold.
    Total Cost of Production ₹1,45,000
    Opening stock of finished goods 22,000
    Closing stock of finished goods 6,000
    Selling and distribution overheads 25,000
    Profit 22,000
24 From the following information calculate the total cost.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct material</td>
<td>1,60,000</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>52,000</td>
</tr>
<tr>
<td>Direct Expenses</td>
<td>19,000</td>
</tr>
<tr>
<td>Factory overheads</td>
<td>45,000</td>
</tr>
<tr>
<td>Office and administration overheads</td>
<td>28,000</td>
</tr>
<tr>
<td>Selling and distribution overheads</td>
<td>33,000</td>
</tr>
</tbody>
</table>

25 From the following information, prepare a cost sheet for period ended on 31st March 2006.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening stock of raw material</td>
<td>12,500</td>
</tr>
<tr>
<td>Purchases of raw material</td>
<td>1,36,000</td>
</tr>
<tr>
<td>Closing stock of raw material</td>
<td>8,500</td>
</tr>
<tr>
<td>Direct wages</td>
<td>54,000</td>
</tr>
<tr>
<td>Direct expenses</td>
<td>12,000</td>
</tr>
<tr>
<td>Factory overheads</td>
<td>100% of direct wages</td>
</tr>
<tr>
<td>Office and administrative overheads</td>
<td>20% of works cost</td>
</tr>
<tr>
<td>Selling and distribution overheads</td>
<td>26,000</td>
</tr>
<tr>
<td>Cost of opening stock of finished goods</td>
<td>12,000</td>
</tr>
<tr>
<td>Cost of Closing stock of finished goods</td>
<td>15,000</td>
</tr>
<tr>
<td>Profit on cost</td>
<td>20%</td>
</tr>
</tbody>
</table>

26 From the following information calculate the cost of goods sold.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost of Production</td>
<td>1,22,000</td>
</tr>
<tr>
<td>Opening stock of finished goods</td>
<td>12,000</td>
</tr>
<tr>
<td>Closing stock of finished goods</td>
<td>16,000</td>
</tr>
</tbody>
</table>

27 What is process costing? What are its essential characteristics?
28 What is normal process loss? How is it treated in process costing?
29 What is abnormal process loss? How is it treated in process costing?
30 What is abnormal process loss? How is it treated in process costing?
31 1,200 kg. of a material was charged to Process I at the rate of 2 per kg. The direct labor accounted for 200 and other departmental expenses amounted to 760. The normal loss is 10 per cent of the input whereas the net production was 1,000 kg. If the process scrap is saleable at 1 per kg. You are required to calculate the value of normal loss and abnormal loss.
32 For the above question, give journal entries to show how the loss arising out of spoiled units should be treated and prepare a process account.
33 The output from Process X totaled 2,500 units. It was considered that 200 units were an abnormal loss. Normal loss allowed was 10%. The other information is given below:
You are required to prepare Process Account and Abnormal Loss Account

34.

<table>
<thead>
<tr>
<th>Process</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (units)</td>
<td>14000</td>
<td>13200</td>
<td>11700</td>
</tr>
<tr>
<td>Process loss (units)</td>
<td>1000</td>
<td>800</td>
<td>1500</td>
</tr>
<tr>
<td>Input</td>
<td>15000</td>
<td>14000</td>
<td>13200</td>
</tr>
<tr>
<td>Normal loss % on input units</td>
<td>4%</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Costs incurred:

<table>
<thead>
<tr>
<th>Costs incurred:</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>45000</td>
<td>20000</td>
<td>7000</td>
</tr>
<tr>
<td>Labour</td>
<td>12500</td>
<td>10000</td>
<td>6750</td>
</tr>
<tr>
<td>Overheads</td>
<td>12500</td>
<td>12500</td>
<td>18750</td>
</tr>
</tbody>
</table>

From the above details, work out the Process a/c, showing clearly the treatment of Normal and Abnormal Loss.

35. In a process engineering factory, a product has to pass through three distinct processes before it is ready for sale. From the information appended below, work out the selling price of the product if the management decides to have a mark up of 25% over its works cost.

<table>
<thead>
<tr>
<th>Stages of Production</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Stages of Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Input of Raw Materials at 4 per kg</td>
<td>1,00,000 kg.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Normal Loss on input of each stage</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>4.</td>
<td>Delivered to Next Process (kg.)</td>
<td>90,000</td>
<td>80,000</td>
</tr>
<tr>
<td>5.</td>
<td>Total Direct Labour Cost</td>
<td>14,000</td>
<td>15,000</td>
</tr>
<tr>
<td>6.</td>
<td>Variable Overheads % on Direct Labour</td>
<td>150</td>
<td>120</td>
</tr>
<tr>
<td>7.</td>
<td>Fixed Overheads % on Direct Labour</td>
<td>250</td>
<td>140</td>
</tr>
<tr>
<td>8.</td>
<td>Finished Stocks held back at the stage</td>
<td>4,000</td>
<td>4,000</td>
</tr>
</tbody>
</table>

For the purpose of this exercise abnormal loss, if any, may be charged to the respective stages since output of each stage can also be diverted to other processes for manufacture of other chemicals.
III  LONG ANSWER TYPE QUESTIONS:

1. What is Unit or Output Costing? In which industries is it used?
2. What is a Cost Sheet? In what respects does it differ from a working of Production Account.
3. Write a short note on unit costing method for ascertaining product cost.
4. Why are Factory overheads not sometimes included in the Valuation of Work-in-progress?
   Would you advocate their inclusion?
5. Draw a proforma cost sheet.
6. What is a cost sheet? Explain the purposes served by it.
7. Select an article in common use; describe the materials, labour and expenses which enter into its cost of production land prepare a cost sheet in proper form to present details of the cost of its production.
8. Distiguish between :
   a) Normal Loss and abnormal loss.
   b) “Job costing” and “Process costing”.
   c) Abnormal Loss and Abnormal gain.
9. Define Joint-products and By-products and cite an example on each. Explain the various bases available for apportionment of joint costs to joint products.
10. “Job costing is more accurate than Process Costing”. Comment on the statement.
11. Explain normal wastage and abnormal wastage and state how they should be dealt with in Process Cost accounts.
12. What are the three most common methods of allocating joint costs of production to joint products?
13. "The value of scrap generated in a process should be credited to the process account”. Do you agree.
14. State the difference between cost sheet and Production Account.
15. What is a blanket overhead rate? In which situation blanket rate is used and why?
16. Describe ‘Direct Material Cost’ and ‘Direct Labour cost’ methods of absorption of factory overhead. Which one of these do you consider is better and why?
17. Describe the prime cost method of absorption of factory overhead. Explain in full and illustrate the basic conditions necessary for its application.
18. Discuss the procedure involved in the calculation of labour hour rate.
19. Discuss the importance of ‘Machine Hour’ as a basis for the absorption of factory overhead.
20. Mr. A furnishes the following data relating to the manufacture of a standard product during the month of January, 2016:
   Raw Material purchased ₹ 15,000
   Opening Stock of Raw Materials ₹ 4,000
   Closing Stock of raw materials ₹ 5,000
   Direct Labor Cost ₹ 9,000
   Machine Hours Worked 900 hours
   Machine Hour Rate ₹ .5
   Carriage Inwards ₹ 1,000
   Administrative Overheads 20 % on Works Cost
Selling Overheads 50 P. per unit sold
Units Produced 17,100
Opening Stock of Finished Products 2,000 units @ ₹ 150 per unit
Units sold 16,000 units
Selling price per unit ₹ 4

You are required to prepare:
2) Cost Sheet
3) A Statement showing Profit for the period.

The following particulars have been extracted from the books of a manufacturing company for the month of March, 2014:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock of materials as on 1st March, 2013</td>
<td>₹ 47,000</td>
</tr>
<tr>
<td>Stock of materials as on 31st March, 2013</td>
<td>₹ 50,000</td>
</tr>
<tr>
<td>Materials purchased during the month</td>
<td>₹ 2,08,000</td>
</tr>
<tr>
<td>Drawing office salaries</td>
<td>₹ 9,600</td>
</tr>
<tr>
<td>Counting house salaries</td>
<td>₹ 14,000</td>
</tr>
<tr>
<td>Carriage on purchases</td>
<td>₹ 8,200</td>
</tr>
<tr>
<td>Carriage on sales</td>
<td>₹ 5,100</td>
</tr>
<tr>
<td>Cash discount allowed</td>
<td>₹ 3,400</td>
</tr>
<tr>
<td>Bad debts written off</td>
<td>₹ 4,700</td>
</tr>
<tr>
<td>Repairs of plant, machinery and tools</td>
<td>₹ 10,600</td>
</tr>
<tr>
<td>Rent, rates, taxes and insurance (factory)</td>
<td>₹ 3,000</td>
</tr>
<tr>
<td>Rent, rates, taxes and insurance (office)</td>
<td>₹ 1,000</td>
</tr>
<tr>
<td>Travelling expenses</td>
<td>₹ 3,100</td>
</tr>
<tr>
<td>Travellers’ salaries and commission</td>
<td>₹ 8,400</td>
</tr>
<tr>
<td>Productive wages</td>
<td>₹ 1,40,000</td>
</tr>
<tr>
<td>Depreciation written off on plant, machinery and tools</td>
<td>₹ 7,100</td>
</tr>
<tr>
<td>Depreciation written off on office furniture</td>
<td>₹ 600</td>
</tr>
<tr>
<td>Directors’ fees</td>
<td>₹ 6,000</td>
</tr>
<tr>
<td>Gas and water charges (factory)</td>
<td>₹ 1,500</td>
</tr>
<tr>
<td>Gas and water charges (office)</td>
<td>₹ 300</td>
</tr>
<tr>
<td>General charges</td>
<td>₹ 5,000</td>
</tr>
<tr>
<td>Manager’s salary</td>
<td>₹ 12,000</td>
</tr>
</tbody>
</table>

Out of 48 working hours in a week, the time devoted by the Manager to the factory and office was on an average 40 hours and 8 hours respectively throughout the month. 1,00,000 units were produced and sold; there was no opening or closing stock of it.

Prepare a cost sheet showing the following:
(i) Cost of Materials Consumed;
(ii) Prime Cost;
(iii) Works Overhead;
(iv) Works Cost;
(v) Office and Administration Overhead;
(vi) Cost of Production;
(vii) Selling and Distribution Overhead; and
(viii) Total Cost or Cost Sales.

22 The following information has been obtained from the records of ABC Co. Ltd. for the month of January, 2014:

- Cost of raw materials on 1/01/2014: 30,000
- Purchase of raw materials during the month: 4,50,000
- Wages paid: 2,30,000
- Factory overheads: 92,000
- Cost of work-in-progress on 1/01/2014: 12,000
- Cost of raw materials on 30/01/2014: 25,000
- Cost of work-in-progress on 30/01/2014: 15,000
- Cost of stock of finished goods on 1/01/2014: 60,000
- Cost of stock of finished goods on 30/01/2014: 55,000
- Administration overheads: 30,000
- Selling and distribution overheads: 20,000
- Sales: 9,00,000

Prepare: (i) Cost sheet showing the cost of production of goods manufactured, and (ii) Statement showing the cost of sales and the profit earned.

23 Prepare a Process Account and Abnormal Loss Account from the following information.

- Input of Raw material: 1000 units @ ₹ 20 per Unit
- Direct Material: ₹ 4,200/
- Direct Wages: ₹ 6,000/
- Production Overheads: ₹ 6,000/
- Actual output transferred to process II: 900 units
- Normal Loss: 5%
- Value of Scrap per unit: ₹ 8/-

24 The following information is available in respect of Process B of Product X:

- Input 5,000 units at a cost of: ₹ 25,000
- Process material Added: ₹ 12,000
- Direct Labour: ₹ 8,000
- Overheads: ₹ 3,000
- Output of Process B: ₹ 4,800 units
- Normal Wastage: ₹ 55 of input

25 Explain the concept of ‘under-absorption’ and ‘over-absorption’ of overhead.

26 A product passes through three processes known as process I, II and III. The output of each process is treated as raw material for the next process, and the output of the third process is treated as Finished Product and transferred to Stock.
<table>
<thead>
<tr>
<th>Processes</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Issued (₹)</td>
<td>40,000</td>
<td>20,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Labour</td>
<td>6,000</td>
<td>4,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Manufacturing Overheads (₹)</td>
<td>10,000</td>
<td>10,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Output(units)</td>
<td>9,750</td>
<td>9,400</td>
<td>8,000</td>
</tr>
<tr>
<td>Normal Loss of Input</td>
<td>2%</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

10,000 units were issued to process I in the beginning. No stock of materials or WIP was left at the end. Calculate the cost of finished product.

The product of a manufacturing concern passes through two processes A and B and then to finished stock. It is ascertained that in each process normally 5% of total weight is lost and 10% is scrap which from Processes A and B realized ₹80 per tonne and ₹120 per tonne respectively.

The following are the figures relating to both the processes:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Process A</th>
<th>Process B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials in tonne</td>
<td>1,000</td>
<td>70</td>
</tr>
<tr>
<td>Cost of materials in rupee per tonne</td>
<td>125</td>
<td>200</td>
</tr>
<tr>
<td>Wages in rupees</td>
<td>28,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Manufacturing expenses in rupees</td>
<td>8,000</td>
<td>5,700</td>
</tr>
<tr>
<td>Output in tonnes</td>
<td>830</td>
<td>780</td>
</tr>
</tbody>
</table>

Prepare Process Cost Accounts showing cost per tonne of each process. There was no stock or work in progress in any process.

The books and records of the Anand manufacturing Company present the following data for the month of August 2016:

<table>
<thead>
<tr>
<th>Direct Labour Cost</th>
<th>₹ 16,000 (160% of factory overheads)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of goods sold</td>
<td>₹ 56,000</td>
</tr>
</tbody>
</table>

Inventory records showed these opening and closing balances:

| Raw materials on August 1 | ₹ 8,000 |
| Raw materials on August 31 | ₹ 8,600 |
| Work in Progress on August 1 | ₹ 8,000 |
| Work in Progress on August 31 | ₹ 12,000 |
| Finished goods on August 1 | ₹ 14,000 |
| Finished Goods on August 31 | ₹ 18,000 |

Other Data is as follows:

| Selling Expenses | Rs.3,400 |
| General and administration expenses | Rs.2,600 |
Sales for the month | Rs.75,000

You are required to prepare a statement showing cost of goods manufactured and sold and profit earned.

29. Explain the elements of cost sheet in detail.

30. From the following particulars of a manufacturing concern, ascertain the Prime Cost:

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening stock of raw materials</td>
<td>20,000</td>
</tr>
<tr>
<td>Closing stock of raw materials</td>
<td>30,000</td>
</tr>
<tr>
<td>Purchase of raw materials</td>
<td>1,05,000</td>
</tr>
<tr>
<td>Import duty paid on raw material purchased</td>
<td>15,000</td>
</tr>
<tr>
<td>Carriage Inward</td>
<td>5,000</td>
</tr>
<tr>
<td>Primary packing materials</td>
<td>3,000</td>
</tr>
<tr>
<td>Productive wages</td>
<td>95,000</td>
</tr>
<tr>
<td>Opening stock of work-in-progress at prime cost</td>
<td>17,000</td>
</tr>
<tr>
<td>Closing stock of work-in-progress at prime cost</td>
<td>10,000</td>
</tr>
<tr>
<td>Hire charge paid on plant</td>
<td>14,000</td>
</tr>
<tr>
<td>Other chargeable expenses</td>
<td>6,000</td>
</tr>
</tbody>
</table>

31. The books and records of the Anand Manufacturing company present the following data for the month of August, 2013:

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct labour cost</td>
<td>16,000 (160% of factory overheads)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>56,000</td>
</tr>
</tbody>
</table>

Inventory accounts showed these opening and closing balances:

<table>
<thead>
<tr>
<th>Description</th>
<th>August 1 (₹)</th>
<th>August 31(₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw material</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Work in progress</td>
<td>8,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Finished goods</td>
<td>14,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Other data:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling expenses</td>
<td>3,400</td>
<td></td>
</tr>
<tr>
<td>General and administrative expenses</td>
<td>2,600</td>
<td></td>
</tr>
<tr>
<td>Sales for the month</td>
<td>75,000</td>
<td></td>
</tr>
</tbody>
</table>

You are required to prepare statement showing cost of goods manufactured and sold and profit earned.
32. A product passes through three processes A, B and C. The details of expenses incurred on the three processes during the year 2014 were as under:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units issued</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost per unit</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry materials</td>
<td>1,600</td>
<td>3,315</td>
<td>3,220</td>
</tr>
<tr>
<td>Labour</td>
<td>2,600</td>
<td>8,000</td>
<td>6,392</td>
</tr>
<tr>
<td>Sale price of output (per unit)</td>
<td>70</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>

Actual output of the three processes was-
- Process A: 930 units
- Process B: 540 units
- Process C: 210 units

Two-thirds of the output of Process A and one half of the output of Process B was passed on to the next process and the balance was sold.

The entire output of Process C was sold.

The normal loss of the three processes, calculated on the input of every process was-
- Process A: 5%
- Process B: 15%
- Process C: 20%

The loss of Process A was sold at ₹1 per unit, that of Process B at ₹3 per unit and that of Process C at ₹6 per unit.

Selling expenses were ₹9,000. These are not allowable to the processes. Prepare three Process accounts and Profit and Loss account.

33. A manufacturer finds that an increase in the cost of production has taken place. Formerly his cost – Raw materials 30%, Wages 20%, Rent, rates, etc. 5%, Fuel 10%, General Expenses 15%. Now there has been an increase of 50% in fuel, 30% in materials, 25% in wages and 20% in rent and rates, etc.

He consults you as to what percentage he must add to the selling price in order to obtain the same profit? What would be the result of your calculations and how would you prove to him that they were correct?

34. Prepare the process account from the following information:

<table>
<thead>
<tr>
<th>Process</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material (Rs.)</td>
<td>30,000</td>
<td>18,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Labour (Rs.)</td>
<td>16,000</td>
<td>10,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Direct Expenses</td>
<td>9,000</td>
<td>6,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>
The output during the period is 2000 units, the overheads are Rs. 7800. Allocate the overheads on the basis as given below:

In process X 150% of Y and in Process Z 50% of Process X.

35 A product is finished in three stages I, II, III.
At the first stage a quantity of 72,000 kg. of material was delivered at cost of 2.50 per kg. The entire material was consumed.
The production particulars with the allocated expenses were as indicated in the table below:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Input kg</th>
<th>Output Kg</th>
<th>Direct Wages</th>
<th>Fixed Overhead %</th>
<th>Varying Overhead %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>72,000</td>
<td>67,680</td>
<td>7,500</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>II</td>
<td>65,000</td>
<td>60,125</td>
<td>12,000</td>
<td>125</td>
<td>150</td>
</tr>
<tr>
<td>III</td>
<td>55,600</td>
<td>50,000</td>
<td>14,500</td>
<td>200</td>
<td>250</td>
</tr>
</tbody>
</table>

The producer, as was his usual practice assessed his cost of 6.77 per kg. based on his input expenditure and the finished output. With a selling price of 7.50 per kg. he estimated his profit at 36,500. If you do not approve of his assessment of the end results of the operation, convince him of the real end-results in a tabular form. You should assume the normal wastage as only 5% on input at each stage and any excess wastage should not be allowed to inflate the cost of the end product.

UNIT-IV

1 MULTIPLE CHOICE QUESTIONS:

1 In contract costing, determination of work in progress include:
A. Work Certified
B. Work Uncertified
C. Retention Money
D. Both a and b
ANSWER: D

2 Work Certified is valued at
A. Cost price
B. Market price
C. Cost or market price whichever is less
D. Estimate price
ANSWER: A

3 The degree of completion of work is determined by comparing the work certified with
A. Contract price
B. Work in progress
C. Cash received on contract
D. Retention money
ANSWER: A

4 In contract costing credit is taken only for a part of the profit on
A. Completed contract
B. In complete contract
C. Cost-plus contract
D. Work Certified
ANSWER: B

5 Escalation Clause in a contract to prefect the interest of
A. Contractor
B. Contractee
C. Surveyor
D. Contractee's Architect
ANSWER: B

6 In contract costing payment of cash to the contractor is made on the basis of
A. Uncertified work
B. Certified work
C. Work in progress
D. Estimated value
ANSWER: B

7 Materials returned under material return note credited to
A. Contract account
B. Work in progress account
C. Plant and machinery account
D. Profit and loss A/C
ANSWER: A

8 Cash received on contract is credited to
A. Contract Account
B. Plant Account
C. Work in Progress Account
D. Contractee's Account
ANSWER: D

9 ABC Company uses a Manufacturing Overhead Control account and a Manufacturing Overhead Applied account. If overhead is overapplied during the period, the journal entry to write it off to cost of goods sold will include:
A. a credit to applied manufacturing overhead
B. a debit to cost of goods sold
C. a debit to manufacturing overhead control
D. a credit to cost of goods sold  
E. None of the above.  
ANSWER: D

10. What type of cost is composed of actual direct material and labor cost plus overhead applied using a predetermined rate and an actual allocation base?  
A. Actual  
B. Normal  
C. Standard  
D. Real  
E. None of the above.  
ANSWER: B

11. Which of the following statements describe a primary difference in job costing between service companies and manufacturing companies?  
A. Service companies generally use fewer direct materials.  
B. Service companies' overhead accounts have slightly different names.  
C. Service companies' finished goods are charged to Cost of Services.  
D. All of the above.  
E. None of the above.  
ANSWER: D

12. Which of the following terms is used to describe complex tasks that often take months or years to complete and require the work of many different departments, divisions, or subcontractors?  
A. Jobs  
B. Tasks  
C. Projects  
D. Ventures  
E. None of the above  
ANSWER: C

13. Which of the following is characteristic of a job order cost accounting system?  
A. It records manufacturing activities using a perpetual inventory system.  
B. It tracks cost by job.  
C. It is best suited for customized products.  
D. All of the above.  
E. None of the above.  
ANSWER: D

14. Which of the following manufacturers is most likely to use a job order cost accounting system?  
A. A soft drink producer.  
B. A flour mill  
C. A gold mining operation.  
D. A builder of offshore oil rigs.
15 Which of the following would be considered factory overhead using a job order cost system?
A. Direct materials.
B. Direct labor.
C. Depreciation on factory buildings.
D. Salesperson's salary.
E. None of the above.
ANSWER: C

16 Service costing is also known as
A. Output costing
B. Operating costing
C. Operation
D. Continuous process.
ANSWER: B

17 Service costing is not used in one of the following;
A. Electricity
B. Transport
C. Hospitals
D. Electronics
ANSWER: D

18 If the present cost of the car is Rs. 50,000, residual value at the end of 5th year is Rs. 10,000, the monthly depreciation is:
A. Rs. 8,000
B. Rs. 667
C. Rs. 8,667
D. None of the above
ANSWER: B

19 A truck starts with a load of 10 tons of goods from station P. It unloads 4 tones at station Q and rest of the goods at station R. It reaches back directly to station P after reloaded with 8 tons of goods at station R. The distances between P to Q, Q to R and then from R to P are 40 kms, 60 kms and 80 kms respectively. What is absolute tone km.
A. 1400
B. 1200
C. 1600
D. 2400
ANSWER: A
20. A truck starts with a load of 10 tones of goods from station P. It unloads 4 tones at station Q and rest of the goods at station R. It reaches back directly to station P after reloaded with 8 tones of goods at station R. The distances between P to Q, Q to R and then from R to P are 40 kms, 60 kms and 80 kms respectively. What is commercial tone km.
   A. 1400
   B. 1440
   C. 1640
   D. 2440
   ANSWER: B

21. The aggregate of direct material and direct labour cost is known as
   A. Prime Cost
   B. Work Cost
   C. Total Cost of Production
   D. Cost of Sales
   ANSWER: A

22. The Cost expended in the past that cannot be retrieved on product or service is:
   A. Relevant Cost
   B. Sunk Cost
   C. Product Cost
   D. Irrelevant Cost
   ANSWER: B

23. A statement of cost of production and profit should preferably termed as:
   A. Production Account
   B. Production Statement
   C. Cost sheet
   ANSWER: B

24. A system of single costing is used in the case of:
   A. Motor workshop
   B. Hotels
   C. Brickworks
   ANSWER: C

25. ______________ ac account giving details of costs of production, cost of sales and profit made during a particular period.
   A. Production Account
   B. Sales Account
   C. Cash Account
   ANSWER: A

26. The ______________ costing is applied when a quantity of similar and identical products are manufactured together as one Job.
   A. Job
B. Batch
C. operation
D. output
ANSWER: B

27 The loss incurred on an incomplete contract is transferred to ……………..account.
A. Costing profit and loss account
B. profit and loss account
C. trading account
D. deferred to next year.
ANSWER: B

28 When the completion stage of the contract is more than half, the profit to be credited to Profit and Loss account will be equal to……………
A. 1/3rd of Notional Profit x cash received Work certified
B. ½ of Notional Profit x cash received Work certified
C. 2/3rd of Notional profit x cash received Work certified
D. full Notional Profit
ANSWER: C

29 When the completion stage of a contract is less than ¼, the total expenditure on the contract is transferred to ……………..account.
A. Work-in-Progress
B. Profit and loss account
C. miscellaneous account
D. none of these
ANSWER: A

30 If the amount of work certified is less than……….of the contract price, then no profit should be taken to Profit & Loss Account.
A. 20%
B. 25%
C. 33 1/3%
D. 40%
ANSWER: B

31 Contract costing is not used in one of the following industries.
A. Ship building
B. Civil Construction
C. Automobiles
D. Construction of Bridges
ANSWER: C

32 The sum of value of work certified and uncertified appearing in the Contract Account is called …………….. 
A. Work done.
B. Work in Process
C. Work Completed
D. Work in Progress
ANSWER: D

33 Room/day is the cost unit used in.................
A. Hotels
B. hospital
C. schools
D. none of these
ANSWER: A

34 .................is the most suitable method in a transport industry.
A. Operation costing
B. Service costing
C. Process costing
D. Job costing
ANSWER: B

35 Economic Batch Quantity depends on .................and .................costs.
A. Material, labour
B. set-up costs, carrying
C. transportation, carrying
D. warehousing, labour
ANSWER: B

36 Budgeted total direct labor cost is divided with budgeted total direct labor, to calculate
A. budgeted indirect labor cost rate
B. expected direct labor cost rate
C. budgeted direct labor cost rate
D. expected indirect labor cost rate
ANSWER: C

37. Budgeted direct labor hours are multiplied to direct labor cost rate, to calculate
A. expected total direct labor cost
B. budgeted total direct labor cost
C. budgeted total indirect labor cost
D. expected labor hours
ANSWER: B

38. Term which describes assigning of indirect cost, to any cost object is classified as
A. cost allocation
B. sales tracing
C. sales allocation
D. cost tracing
ANSWER: A
39. A document which contains information about materials of specific product, in specific department comes under
   A. costing method
   B. selling method
   C. material acquisition method
   D. none of above
   ANSWER: C

40. If budgeted annual indirect cost is $60000, budgeted annual quantity of cost allocation base is $3600, then budgeted indirect cost rate will be
   A. 15.67 per piece
   B. 16.67 per piece
   C. 14.67 per piece
   D. 13.67 per piece
   ANSWER: B

41. An under allocated indirect cost is also called
   A. under applied indirect cost
   B. under absorbed indirect cost
   C. absorbed indirect cost
   D. both a and b
   ANSWER: D

42. In normal costing, situation in which allocated amount of indirect cost is greater than incurred cost, is considered as
   A. incurred indirect cost
   B. over allocated indirect cost
   C. applied indirect cost
   D. applied direct cost
   ANSWER: B

43. A group of individual indirect cost item is defined as
   A. direct pool
   B. cost pool
   C. indirect pool
   D. item pool
   ANSWER: B

44. Total indirect cost in pool by an actual quantity of cost allocation base, is used to calculate
   A. actual manufacturing overhead rate
   B. manufacturing overhead costs
   C. overhead rate
   D. direct rate
   ANSWER: A
45. An approach which yields benefits of normal costing and actual manufacturing overhead is classified as
   A. unadjusted allocation rate approach  
   B. adjusted budget rate approach  
   C. unadjusted budget rate approach  
   D. adjusted allocation rate approach  
   ANSWER: D

II SHORT ANSWER TYPE QUESTIONS:

1. What is meant by job costing?
2. Explain the meaning of Batch costing.
3. What are the advantages of job costing?
4. List out the limitations of job costing.
5. Discuss the procedure for job cost accounting.
6. What are the various types of production orders?
7. Explain the concept of cost control in job order system.
8. What’s your viewpoint about advantages and disadvantages of job costing.
9. What do you understand by Economic batch quantity (EBQ)?
10. Write short notes on:
    a) Sub-contract  
    b) Surveyor’s certificate
11. Write short notes on:
    a) Defective work  
    b) Escalation Clause  
    c) Work- in- progress
12. Write short note on service costing.
13. Classification of cost in a transport organization.
14. Explain the significance of running cost.
15. State the difference between standing charges and variable charges.
16. Write short note collection of costing data.
17. Explain Absolute Tonne –Kms and commercial Tonne-Kms.
18. Explain the difference between Operating costing and Operation costing.
19. Give few examples of Standing charges and variable charges.
20. Following information is extracted from the job ledger in respect of Job no. 123:
    a. Materials: Rs. 6800  
    b. Wages 80 hours @ 5 Per hour  
    c. Variable overheads incurred for all jobs Rs. 10000 for 4000 Labour hours
   Find out the profit if the job is billed for Rs. 9000
21. The following was the expenditure on the contract for Rs. 6,00,000. Work commenced on 1st January, 2015:
   Materials Rs. 1,30,000
   Wages    Rs. 1,44,000
   Plant    Rs. 20,000
   Other Expenses Rs. 18,600
Cash received on account was Rs. 2,40,000, being 80% of work certified. Value of materials on hand at 31st December, 2015 was Rs. 10,000. Plant is to be depreciated @ 10%. Prepare Contract account for 2015, showing the profit to be credited to Profit and Loss account.

M/s Jain & Sons is a firm of Govt. Contractors. It took a contract for Rs. 5,00,000 on 1st Jan. 2010 and incurred the following expenses on it upto 31st Dec. 2010:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials Purchased</td>
<td>62,500</td>
</tr>
<tr>
<td>Materials issued from stores</td>
<td>45,000</td>
</tr>
<tr>
<td>Plant issued</td>
<td>30,000</td>
</tr>
<tr>
<td>Wages paid</td>
<td>65,000</td>
</tr>
<tr>
<td>Outstanding wages</td>
<td>14,500</td>
</tr>
<tr>
<td>Office expenses</td>
<td>10,500</td>
</tr>
</tbody>
</table>

Cash received upto 31st Dec. 2010 amounted to Rs. 2,10,000 being 75% of the work certified. Materials valued Rs. 6,000 and plant costing Rs. 5,000 were destroyed due to fire in the depot. On 31st Dec. 2010, plant costing Rs. 5,000 returned to stores and the materials costing Rs. 5,000 were sold for Rs. 8,000. He cost of work done but uncertified was Rs. 15,000, Materials at site were valued at Rs. 8,000. Charge depreciation @ 10% on plant, reserve ¼ of profit received, transfer ¾ of profit received to P&L a/c and prepare Contract Account. Also, prepare work in progress A/c and Balance Sheet.

23 Write short notes on:
   a) Incomplete projects
   b) Steps for allocation of profits

24 Discuss the concept of contract costing and services costing.

25 Discuss in detail the steps involved in service costing.

26 What is the difference between job costing and batch costing?

27 What is escalation clause?

28 Explain the accounting treatment for plant used in contract.

29 How work in progress is calculated in contract costing?

30 What is absolute tonne km and commercial tonne km?

31 What is meant by Job Costing? Give examples of (any four) industries where it is used.

32 State the escalation clause in contract costing.

33 Discuss briefly the principles to be followed while taking credit for profit on incomplete contract?

34 Explain the terms notional profit and retention money in contract costing.

35 What is cost plus contract? What are its advantages?

III LONG ANSWER TYPE QUESTIONS:

1 Discuss the nature of contract costing and how and explain how costs are recorded in contracts.

2 Describe job Costing and Batch Costing giving example of industries where these are used?
3 Distinguish between Job Costing & Batch Costing?
4 Distinguish between job costing and process costing?
5 what are the methods of costing?
6 “Operating costing is defined as refinement of Process costing”. Explain.
7 State the unit of cost for the following industries:
   (a) Transport 
   (b) Power 
   (c) Hotel 
   (d) Hospital 
   (e) Steel 
   (f) automobile
8 Explain briefly What do you understand by Operating Costing? How composite units are computed?
9 Write short notes on:
   (a) Escalation Clause 
   (b) Cost Plus Contracts 
   (c) Features of Job costing
10 Give your views regarding justification in charging profit on incomplete contracts and explain methods of charging profit on incomplete projects.
11 What is the difference between job costing and contract costing? Explain the objectives and procedure of job costing system.
12 What do you understand by “Operating Cost”? Describe its essential features and state where it can be usefully implemented?
13 With a mixed fleet of hundred goods-transport vehicles, show how would you calculate an hourly rate per vehicle for charging to jobs and services.
14 What is “Operating costing”? Draw a statement with imaginary figures for working out the running cost per Kilometer of a taxi.
15 “The more kilometers you travel with your own vehicle, the cheaper it becomes”. Comment briefly on this statement.
16 What is job costing? Explain its characteristics and accounting procedure. How does job costing differ from contract costing?
17 Define contract costing. Discuss the basic features of contract costing.
18 A company has 20 vehicles, which capacities are as follows:

<table>
<thead>
<tr>
<th>No. of Vehicles</th>
<th>Capacity per vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>9 tonne</td>
</tr>
<tr>
<td>6</td>
<td>12 tonne</td>
</tr>
<tr>
<td>7</td>
<td>15 tonne</td>
</tr>
<tr>
<td>2</td>
<td>20 tonne</td>
</tr>
</tbody>
</table>

The company provides the goods transport service between stations ‘A’ to station ‘B’. Distance between these stations is 200 kilometers. Each vehicle makes one round trip per day an average. Vehicles are loaded with an average of 90 percent of capacity at the time of departure from station ‘A’ to station ‘B’ and at the time of return back loaded with 70 percent of capacity. 10 percent of vehicles are laid up for repairs every day. The following information are related to the month of October, 2008:
Salary of transport manager  
Rs. 30,000  
Salary of 30 drivers  
Rs.4,000 each driver  
Wages of 25 helpers  
Rs.2,000 each helper  
Wages of 20 Labourers  
Rs.1,500 each labourer  
Consumables stores  
Rs.45,000  
Insurance (Annual)  
Rs.24,000  
Road License (Annual)  
Rs.60,000  
Cost of diesel per litre  
Rs.35  
Kilometers run per litre each vehicle  
5 Km.  
Lubricant, oil etc.  
Rs.23,500  
Cost of replacement of tyres, tubes other parts etc.  
Rs.1,25,000  
Garage rent (Annual)  
Rs.90,000  
Transport technical service charges  
Rs.10,000  
Electricity and gas charges  
Rs.5,000  
Depreciation of vehicles  
Rs.2,00,000

There is a workshop attached to transport department which repairs these vehicles and other vehicles also. 40 per cent of transport manager’s salary is debited to the workshop. The transport department is charged Rs. 28,000 for the services rendered by the workshop during October, 2008. During the month of October, 2008 operation was 25 days.

You are required:
(i) Calculate per tonne kilometer operating cost.
(ii) Find out the freight to be charged per tone kilometer, if the company earned a profit of Rs. 25 per cent on freight.

Goodwill Ltd. commenced a contract on 1st January, 2005. The total contract was for Rs. 10,00,000 (estimated by the contractee) and was accepted by Goodwill at 10% less. It was decided to estimate the total profit and to take to the credit of P& L Account that proportion of estimated profit on cash basis which the work completed bore to the total contract. Actual expenditure in 2005 and estimated expenditure in 2006 are given below:

<table>
<thead>
<tr>
<th></th>
<th>2005 (Actual)</th>
<th>2006 (Estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>1,50,000</td>
<td>2,60,000</td>
</tr>
<tr>
<td>Labour: Paid</td>
<td>1,00,000</td>
<td>1,20,000</td>
</tr>
<tr>
<td>Accrued</td>
<td>10,000</td>
<td>-</td>
</tr>
<tr>
<td>Plant purchased</td>
<td>80,000</td>
<td>-</td>
</tr>
<tr>
<td>Expenses</td>
<td>40,000</td>
<td>71,000</td>
</tr>
<tr>
<td>Plant returned to store on (cost)</td>
<td>20,000</td>
<td>50,000</td>
</tr>
<tr>
<td>(31 Dec.)</td>
<td></td>
<td>(on 30.09.06)</td>
</tr>
<tr>
<td>Material at site</td>
<td>10,000</td>
<td>-</td>
</tr>
<tr>
<td>Work certified</td>
<td>4,00,000</td>
<td>Full</td>
</tr>
<tr>
<td>Work Uncertified</td>
<td>15,000</td>
<td>-</td>
</tr>
<tr>
<td>Cash received</td>
<td>3,00,000</td>
<td>Full</td>
</tr>
</tbody>
</table>
The plant is subject to annual depreciation @ 20% of cost. The contract is likely to be completed on 30th September, 2006. Prepare the Contract account.

20 In a machine shop, the machine hour rate, worked out at the beginning of a year on the basis of 13 week period which is equal to 3 calendar months. The following estimates for operating a machine are relevant:

<table>
<thead>
<tr>
<th>Total working hours available per week</th>
<th>48 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance time included in above</td>
<td>2 hours</td>
</tr>
<tr>
<td>Setting up time included in above</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

Cost details

| Operator’s wages p. m       | (Common supervisor’s for three machines) |
| Supervisory salary p.m      | W. D. V. of machine                     |
|                            | (Dep. at 10% plus 2% on an average for extra shift allowance) |
| Repairs and maintenance p.a | (for the quarter apportioned) |
| Consumable stores p.a       | Rent, rates and taxes                  |

Power consumed @ 15 units per hour @ 40 paise per unit. Power required for productive time but no power is required for setting up jobs.

21 A truck starts with a load of 10 tonnes of goods from station P. It unloads 4 tonnes at station Q and rest of the goods at station R. It reaches back directly to station P after getting reloaded with 8 tonnes of goods at station R. The distances between P to Q, Q to R and then from R to P are 40 km, 60 km and 80 km respectively. Compute

(a) Absolute tone-km and (Ans. 1,400 tonne-km)
(b) Commercial tone-km.(Ans. 1,440 tonne-km)

22 Fast Roadway runs 10 buses between two suburban centres which are 25 kilometres apart. Seating capacity of each bus is 30 passengers. The expenses for the month of November 1994 were as under:

| Salaries of Drivers and Conductors | Rs. 60,000 |
| Salaries of Mechanical Staff       | 6,000      |
| Diesel Oil and Lubricants          | 40,000     |
| Taxes, Insurance, etc.             | 5,200      |
| Repairs, and Maintenance           | 8,000      |
| Depreciation                       | 32,000     |
| Seating capacity utilized was      | 60%        |

All the buses ran 25 days of the month. Each bus made four round trips daily.

(a) Find out the cost per passenger-km and the cost per round trip per passenger. (Ans. Rs. 0.168 and Rs. 8.40)

(b) What would have been the cost per round trip per passenger, if the seating capacity utilization were to go up to 80%?
(c) What would have been the cost per round trip per passenger, if all the expenses (other than depreciation) were to go up by 20% at a seating capacity utilization of 80%?

(Ans. Rs. 7.30)

23 S has been promised a contract to run a tourist car on a 20 km long route for the chief executive of a multinational firm. He buys a car costing Rs. 1,50,000. The annual cost of insurance and taxes are Rs. 4,500 and Rs. 900 respectively. He has to pay Rs. 500 per month for a garage where he keeps the car when not in use. The annual repair costs are estimated at Rs. 4,000. The car is estimated to have a life of 10 years, at the end of which the scrap value is likely to be Rs. 50,000. He hires a driver who is to be paid Rs. 300 per month plus 10% of the takings as commission. Other incidental expenses are estimated at Rs. 200 per month. Petrol and oil will cost Rs. 100 per 100 kms. The car will make 4 round trips each day. Assuming that a profit of 15% on takings is desired and that the car will be on the road for 25 days on an average per month, what should be the charge per round trip?

(Ans. Rs. 88.22)

24 From the following information, prepare a monthly cost sheet of XYZ Brick Works, showing Cost and Profit per ‘S’ brick. (S= 1,000 bricks)

<table>
<thead>
<tr>
<th>Material used:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lime</td>
<td>895 tonnes at Rs. 500 per tone</td>
</tr>
<tr>
<td>Coal</td>
<td>825 tonnes at Rs. 300 per tone</td>
</tr>
<tr>
<td>Sand</td>
<td>Rs. 15 per S bricks made</td>
</tr>
<tr>
<td>Stores</td>
<td>Rs. 1,46,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labour:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand digging and running</td>
<td>Rs. 1,00,000</td>
</tr>
<tr>
<td>Bricks making</td>
<td>Rs. 4,00,000</td>
</tr>
<tr>
<td>Factory O/H</td>
<td>25% on direct charges</td>
</tr>
<tr>
<td>Office O/H</td>
<td>10% on direct charges</td>
</tr>
<tr>
<td>Bricks sold</td>
<td>3,500 S @ Rs. 550 per S</td>
</tr>
<tr>
<td>Opening stock of bricks</td>
<td>100S</td>
</tr>
<tr>
<td>Closing stock of bricks</td>
<td>600 S</td>
</tr>
</tbody>
</table>

25 A transport service company is running four buses between two towns, which are 100 miles apart. The seating capacity of each bus is 40 passengers. The following particulars are available for October, 2013:

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages of drivers, conductors and cleaners</td>
<td>48,000</td>
</tr>
<tr>
<td>Salaries of office staff and inspectors</td>
<td>20,000</td>
</tr>
<tr>
<td>Diesel and lubricants</td>
<td>80,000</td>
</tr>
<tr>
<td>Repairs and maintenance</td>
<td>16,000</td>
</tr>
<tr>
<td>Road tax and insurance</td>
<td>32,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>52,000</td>
</tr>
<tr>
<td>Interest and other charges</td>
<td>40,000</td>
</tr>
</tbody>
</table>
A contractor commenced a contract on 1st July 2009 and the contractor provides the following information on 31st March 2010:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>42,000</td>
</tr>
<tr>
<td>Labour</td>
<td>1,02,000</td>
</tr>
<tr>
<td>Other charges</td>
<td>12,500</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>25,500</td>
</tr>
<tr>
<td>Material in hand</td>
<td>4,400</td>
</tr>
</tbody>
</table>

A machine costing ₹36,000 had been on site for 6 months. The working life of machinery is estimated six years and the scrap value at ₹6,000. A supervisor who is paid ₹1,600 per year has spent ½ (one half) of his time on the contract. The contract price was ₹4,00,000 and on 31st March 2010 the 2/3rd of the contract was completed. Cash received ₹1,50,000 being 75% of work certified. Prepare Contract A/c and Work in Progress A/c.

What is Job Costing? Explain its characteristics and accounting procedure. How does Job Costing differ from Contract Costing?

Write short notes on the following-
   a) Contract costing
   b) batch costing
   c) operating costing
   d) job costing

The following are the particulars relating to a contract which has begun on 1st January 2013.

<table>
<thead>
<tr>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract price</td>
</tr>
<tr>
<td>Machinery</td>
</tr>
<tr>
<td>Materials</td>
</tr>
<tr>
<td>Wages</td>
</tr>
<tr>
<td>Direct expenses</td>
</tr>
<tr>
<td>Outstanding wages</td>
</tr>
<tr>
<td>Uncertified work</td>
</tr>
<tr>
<td>Overheads</td>
</tr>
<tr>
<td>Materials returned</td>
</tr>
<tr>
<td>Materials on hand(opening balance)</td>
</tr>
<tr>
<td>Materials on hand(closing balance)</td>
</tr>
<tr>
<td>Value of work certified</td>
</tr>
<tr>
<td>Cash received</td>
</tr>
</tbody>
</table>

Prepare the contract account for the year 2013 showing the amount of profit that may be taken to the credit of profit & loss a/c of the year. Also show the amount of the work in progress as it would appear in the balance sheet of the year.
30 Union Transport Company supplies the following details in respect of a truck of 5-tonne capacity:

<table>
<thead>
<tr>
<th>Cost</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of truck</td>
<td>90,000</td>
</tr>
<tr>
<td>Estimated life</td>
<td>10 years</td>
</tr>
<tr>
<td>Diesel, oil, grease</td>
<td>15 per trip each way</td>
</tr>
<tr>
<td>Repairs and maintenance</td>
<td>500 per month</td>
</tr>
<tr>
<td>Driver’s wage</td>
<td>500 per month</td>
</tr>
<tr>
<td>Cleaner’s wage</td>
<td>250 per month</td>
</tr>
<tr>
<td>Insurance</td>
<td>4,800 per year</td>
</tr>
<tr>
<td>Tax</td>
<td>2,400 per year</td>
</tr>
<tr>
<td>General supervision charges</td>
<td>4,800 per year</td>
</tr>
</tbody>
</table>

The truck carries goods to and from city covering a distance of 50 miles each way.

While going to the city freight is available to the extent of full capacity.

Assuming that the truck runs on an average 25 days a month, work out:

(i) Operating cost per tonne-mile, and

(ii) Rate per ton per trip that the company should charge if profit of 50% on freightage is to be earned.

31 Prepare Contract account and Contractee’s account assuming that the amount due from the contractee was duly received.

<table>
<thead>
<tr>
<th></th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Material</td>
<td>20,250</td>
</tr>
<tr>
<td>Direct wages</td>
<td>15,500</td>
</tr>
<tr>
<td>Stores issued</td>
<td>10,500</td>
</tr>
<tr>
<td>Loose tools</td>
<td>2,400</td>
</tr>
<tr>
<td>Tractor expenses:</td>
<td></td>
</tr>
<tr>
<td>Fuel, oil, etc.</td>
<td>2,300</td>
</tr>
<tr>
<td>Wages of drivers</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>5,300</td>
</tr>
<tr>
<td>Other direct charges</td>
<td>2,650</td>
</tr>
</tbody>
</table>

The contract price was ₹90,000 and the contract took 13 weeks in its completion. The value of Loose Tools and Stores returned at the end of the period were ₹200 and ₹3,000 respectively. The plant was also returned at a value of ₹16,000 after charging depreciation at 20%. The value of tractor was ₹20,000 and the depreciation was to be charged to the contract @ 15% per annum. The administrative and office expenses are to be provided at 10% on works cost.

32 What is job costing? How does job costing differ from batch costing? How is job costing in service organizations different from job costing in manufacturing organizations?
33 Write up a contract account from the following:

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Material</td>
<td>28,000</td>
</tr>
<tr>
<td>Wages</td>
<td>22,000</td>
</tr>
<tr>
<td>Special Plant</td>
<td>18,000</td>
</tr>
<tr>
<td>Store Issued</td>
<td>9,000</td>
</tr>
<tr>
<td>Loose Tools</td>
<td>2,500</td>
</tr>
<tr>
<td>Cost of Tractor:</td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td>4,000</td>
</tr>
<tr>
<td>Wages of Driver</td>
<td>8,000</td>
</tr>
</tbody>
</table>

The contract was completed in 26 weeks at the end of which the plant was returned subject to a depreciation of 20% on the original cost. The value of loose tools and stores returned were Rs.500 and Rs.1000 respectively. The value of the tractor was Rs.1,20,000 and the depreciation is to be charged to this contract @ 20% per year. Provided office overheads @ 10% on works cost. The contract was agreed to be performed at a profit of 25% on total cost.

34 What is meant by operating cost and operating costing? In which industries it is used? Prepare operating cost sheet with imaginary figures.

35 ABC Transport Company supplies the following details with respect of a truck of 5 tonne capacity:

Cost of truck: ₹900000
Estimated life: 10 years
Diesel, oil, grease etc.: ₹150 per trip each way
Repairs and maintenance: ₹5000 per month
Cleaner’s wages: ₹2500 per month
Driver’s wages: ₹5000 per month
Insurance: ₹4800 per year
Tax: ₹2400 per year
General supervision charges: ₹4800 per year

The truck carries goods to and from city covering a distance of 50 miles each way. While going to the city freight is available to the extent of full capacity and on return 20% of capacity. Assuming that truck run on an average 25 days a month, work out
i) Operating cost per tonne mile, and
ii) Rate per trip that the company should charge if profit of 50% on freightage is to be earned.
UNIT – I

I. MULTIPLE CHOICE QUESTIONS:

1. Which of the following is not a type of code of conduct of business?
   A. Organizational code
   B. Company philosophy
   C. Policy guidelines
   D. Professional code of conduct

   ANSWER: D

2. Political and legal environment of business does not consist of
   A. Foreign policy
   B. Political stability
   C. Wealth maximization
   D. Legal rules governing a business

   ANSWER: D

3. Interaction between business system and its environment consists of
   A. Exchange of information
   B. Exchange of resources
   C. Exchange of influence and power
   D. All of the above

   ANSWER: C

4. Which of the following is not a strategy to cope with turbulent environment?
   A. Wait and watch
   B. Exchange of resources
   C. Anticipation and adaptation
   D. Innovative approach

   ANSWER: D

5. Economic objectives of business consist of
   A. Profit making
   B. Creation of customers
   C. Innovation
   D. All of the above

   ANSWER: B

6. Which of the following is not a human objective of business?
   A. Fair deal to employees
   B. Innovation
7. Which of the following is not a type of code of conduct of business?
   A. Organizational code
   B. Company philosophy
   C. Policy guidelines
   D. Professional code of conduct
   ANSWER: A

8. Political and legal environment of business does not consist of
   A. Foreign policy
   B. Political stability
   C. Wealth maximization
   D. Legal rules governing a business
   ANSWER: C

9. Interaction between business system and its environment consists of
   A. Exchange of information
   B. Exchange of resources
   C. Exchange of influence and power
   D. All of the above
   ANSWER: D

10. Which of the following is not a strategy to cope with turbulent environment?
    A. Wait and watch
    B. Exchange of resources
    C. Anticipation and adaptation
    D. Innovative approach
    ANSWER: B

11. Economic objectives of business consist of
    A. Profit making
    B. Creation of customers
    C. Innovation
    D. All of the above
    ANSWER: D

12. Which of the following is not a human objective of business?
    A. Fair deal to employees
    B. Innovation
    C. Job satisfaction
    D. Participation
    ANSWER: B
13. Which of the following is not an essential reason for making profit by a business organization?
   A. Growth
   B. Prestige
   C. Closure plans
   D. Survival
   ANSWER: C

14. Which of the following is not a case against social responsibility of business?
   A. Dilution of profit maximization
   B. Loss of incentive
   C. Lack of yardstick
   D. Avoiding government intervention
   ANSWER: D

15. A business organization has responsibility towards:
   A. Shareholders
   B. Employees
   C. Government
   D. All of the above
   ANSWER: D

16. Which of the following does not amount to being a measure to enforce social responsibility of a business?
   A. Legislative measure
   B. Government control
   C. Self-control
   D. Voluntary measure
   ANSWER: C

17. The ethical issues in business can be classified into which category?
   A. Societal level
   B. Stakeholders level
   C. Internal policy level
   D. All of the above
   ANSWER: D

18. Which of the following is not a principle of corporate governance?
   A. Transparency
   B. Accountability
   C. Globalization
   D. Merit based management
   ANSWER: C

19. The main issues in the area of corporate governance in India are
   A. Role of board of directors
B. Composition of board
C. Audit committee
D. All of the above
ANSWER: D

20. Which of the following is not an essential reason for profit making in business?
A. Growth
B. Inconsistency with modern trends
C. Survival
D. Efficiency
ANSWER: B

21. Liberalization means
A. Reducing number of reserved industries from 17 to 8
B. Liberating the industry, trade and economy from unwanted restrictions
C. Opening up of economy to the world by attaining international competitiveness
D. Free determination of interest rates
ANSWER: D

22. Relaxing the restrictions and controls imposed on Business and industry means
A. Liberalisation
B. Privatisation
C. Globalisation
D. None of the above
ANSWER: A

23. __________ is an economic system based on the principal of free enterprise.
A. Capitalism
B. Socialism
C. Mixed Economy
D. Marxism
ANSWER: A

24. Which among these is not a method of privatisation?
A. Denationalisation
B. Franchising
C. Sale of Business
D. All of these
ANSWER: C

25. Which one is not an element of internal environment?
A. Marketing capabilities
B. Operational Capabilities
C. Money and capital market
D. Personal Capabilities
ANSWER: C
26. Which is an example of ethical codes?
   A. We believe in more production
   B. We believe in assets
   C. We believe in money
   D. None of these
   ANSWER: D

27. "Business ethics is related with the test of values or social values." Who said it?
   A. Peter F. Drucker
   B. Fredrick
   C. Keith Devis
   D. J. R. Betty
   ANSWER: A

28. The principle of business ethics includes
   A. Principle of co-operation with others
   B. Principle of publicity
   C. Principle of equivalent price
   D. All of the above
   ANSWER: D

29. All definitions of Corporate Social Responsibility recognize that:
   A. companies have a responsibility for their impact on society and environment.
   B. the natural environment should be the main focus of CSR activities.
   C. business ethics is a complex issue.
   D. companies must pay equal attention to business ethics and sustainability.
   ANSWER: A

30. Who said that the "only one social responsibility of business is to increase profits"?
   A. Edward Freeman
   B. Milton Friedman
   C. Michael Porter
   D. Michael Freeman
   ANSWER: B

31. What is the main characteristic of the stakeholder approach?
   A. The idea that many different groups have a legitimate interest in the corporation
   B. It is a critical perspective on corporations and business.
   C. A focus on social and environmental responsibilities of a corporation.
   D. The assumption that shareholders are not the main stakeholders in the corporation.
   ANSWER: A

32. What are the four generic strategies of social responsiveness?
   A. Proaction, Defensive, Reinvestment, Reaction
   B. Reaction, Defence, Reinvestment, Proaction
C. Reaction, Defence, Investment, Withdrawal
D. Reaction, Defence, Accommodation, Proaction

ANSWER: D

33. Michael Porter and Mark Kramer said that:
   A. Social responsibility does not matter for firm strategies.
   B. Socially responsible firms act against the interests of shareholders.
   C. Social responsibility can help firms to discover future business opportunities.
   D. Social responsibility is a long-term investment in a company's advertising and public relations.

ANSWER: C

34. Which of the following is NOT an example of a political risk?
   A. Government regulations
   B. Cost of production
   C. War
   D. Civil unrest

ANSWER: B

35. Obstacles which potential newcomers would encounter when entering a market are called:
   A. Economies of scale
   B. Mobility barriers
   C. Buyer switching costs
   D. Barriers to entry

ANSWER: D

36. -------is the process of analyzing the environment for the identification of factors which have impact on or have implication for the business.
   A. Forecasting
   B. Assessment
   C. Scanning
   D. None of these

ANSWER: C

37. The low-income economies are sometimes referred to as -------
   A. First world
   B. Second world
   C. Third world
   D. None of these

ANSWER: C

38. -------consist of economic conditions, economic policies, industrial policies and economic system
   A. Business Environment
   B. Economic Environment
39. Indian Economy is an example of ------
   A. Capitalist economy
   B. Closed economy
   C. Mixed Economy
   D. None of these
   ANSWER: C

40. ___________ economy is not planned, controlled or regulated by the Govt.
   A. Closed Economy
   B. Mixed Economy
   C. Free market economy
   D. None of these
   ANSWER: C

41. ___________ is the main aim of economic planning in India?
   A. Economic Growth
   B. Industrial expansion
   C. Growth with social justice
   D. None
   ANSWER: C

42. ___________ is the apex body of the economic planning in India?
   A. Planning Commission
   B. Parliament
   C. Supreme Court
   D. None of these
   ANSWER: A

43. An environment which is increasingly complex and turbulent displays
   A. More orderly competition
   B. More predictable demand
   C. A reduced risk of product obsolescence
   D. Increased speed of innovation
   ANSWER: D

44. An analysis of the external environment enables a firm to identify
   A. Strengths and opportunities
   B. Strength and weakness
   C. Weakness and threats
   D. Opportunities and threats
   ANSWER: D
45. These are forces in the company’s immediate environment that affect the performance of the Co.
   A. Macro environment
   B. Micro environment
   C. Technological environment
   D. Natural environment

ANSWER: A

II. SHORT ANSWER TYPE QUESTIONS:

1. List the reasons for social responsibilities of a business.
2. What do you understand by business, profession and employment?
3. Explain the characteristics of business.
4. What is an Industry? What are its various types?
5. Explain at least 4 hindrances that come in the way of uninterrupted flow of goods and services from producers to consumers.
6. What are Auxiliaries to trade?
7. Explain in brief the concept of a system.
8. How do the various sub-systems interact with one another?
9. What are the various techniques of integration of various sub-systems?
10. “Business is an economic institution operating in a socio-political environment”. Do you agree?
11. Write short notes on business as a system.
12. What are the salient features of business as a system?
13. “The main objective of any business is to render service to the community”. Do you agree with the statement?
14. What are the various objectives of a business?
15. “The purpose of a business is the create customers”. Do you agree with the statement? Give valid reasoning.
16. “The concept of social responsibility is ultimately in the interest of the business itself” present your viewpoint on the above statement.
17. What do you understand by the concept of corporate governance?
18. Explain the scope of business ethics.
19. What do you understand by code of conduct?
20. Explain the importance of values in business.
21. What ethics need to be followed while carrying on business activities?
22. Is there a need for a business organization to follow business ethics?
23. What are your views on ethics in employment?
24. What impact do business ethics have on society?
25. What factors influence the business ethics of an organization?
26. Differentiate between Trade, Commerce and Industry.
27. What influences a businessman to make ethical or unethical decisions?
29. What is an economic activity?
30. List the types of economic activities.
31. What are various values that a business organization must possess?
32. Distinguish between values and ethics of a business organization.
33. How can natural environment affect the success of a business organization?
34. Firms which systematically analyze and diagnose the environment are more effective than those which do not.” Elucidate the statement.
35. What do you mean by social responsibility of business? What are the various kinds of social responsibility of business?

III  LONG ANSWER TYPE QUESTIONS:

1. Why should a business assume social responsibilities? Support your answer with valid reasons.
2. Differentiate between business, profession and employment.
3. Explain the various types of non-economic environment.
4. Is there any interaction between the business system and its environment?
5. Is there any means through which the business organization can deal with its environment?
6. What are the various objectives of a business organization? Explain them in detail.
7. “Earning of profits cannot be the objective of a business anymore than eating is the objective of living”. Do you agree? Give reasons.
8. Explain in detail the objectives against profit maximization.
9. What are the various causes for growing concern for fulfilling the social responsibility of business?
10. Present your views on profit maximization vs. wealth maximization.
11. Write an essay on social responsibility of business.
12. Explain by giving examples whether the social responsibility of business is the same as responsibility of management to the society.
13. “Business owes no responsibility”. Discuss
14. Explain in detail the responsibility that a business organization has towards various groups.
15. Explain the factors governing business ethics.
16. What is code of ethics? Describe the benefits of such codes.
17. Explain the concept of business ethics. Discuss the need and importance of business ethics.
18. Define values. Distinguish between social values and corporate values.
19. What are the various factors that have a bearing on business ethics?
20. What do you understand by business values? What is the importance of values in business?
21. Is there any difference between business code of conduct and business ethics?
22. Differentiate between corporate values and social values.
23. Are there any professional ethics that have a bearing on the management functions?
24. Should a business organization follow any ethics while taking over a corporate?
25. Differentiate between business values and business ethics.
27. Discuss various ways in which business activities may be classified. Give two examples each of such classification.
28. What is meant by auxiliaries to business? Discuss their significance for the growth of industries and trade.
29. “Social and cultural forces affect a business as much as economic forces do”. Comment.
30. Enumerate major factors of a firm’s environment. Explain also the inputs of environment.
31. Discuss the concept of business as a system. What are the elements of Macro environment that surrounds the business? Discuss these environmental variables in brief by bringing out their impact on business.

32. What are business ethics? How are they different from social responsibility of Business? Discuss both these concepts with examples.

33. What are the main challenges faced when trying to convince companies about the importance of CSR reporting?

34. Elaborate on the evolution and future of corporate social responsibility.

35. How important is for a company to be transparent about its CSR activities?

36. Are there any cultural differences regarding the approach towards social responsibility?

37. What are the main challenges that the field of corporate social responsibility?

UNIT – II

I MULTIPLE CHOICE QUESTIONS:

1. Entrepreneurship is an
   A. Economic activity’
   B. Creative activity
   C. Purposeful activity
   D. All of the above
   ANSWER: D

2. Which of the following is not a quality of a successful entrepreneur?
   A. Capacity to assume risk
   B. Technical knowledge and willingness
   C. Non enterprising
   D. Ability to organize and Marshall resources
   ANSWER: C

3. Location of a plant is not dependent on
   A. Raw material availability
   B. Markets
   C. Climate and topography
   D. Capital investment
   ANSWER: D

4. Which out of these is not a limitation of sole proprietorship?
   A. Independent living
   B. Unlimited liability
   C. Instability
   D. Limited finances
   ANSWER: A

5. Which of the following is a limitation of Joint Hindu Family Business?
   A. Unlimited liability
B. Hasty decisions  
C. Source of conflict  
D. All of the above  
ANSWER: D

6. Which out of these is not an essential of an ideal partnership?  
   A. Mutual trust and faith  
   B. Registration  
   C. Common approach  
   D. Long duration  
ANSWER: B

7. Partners can be classified into  
   A. Active partner  
   B. Limited partner  
   C. Dormant partner  
   D. All of the above  
ANSWER: D

8. Which out of these is not a mode of dissolution of a firm  
   A. Dissolution by agreement  
   B. Contingent dissolution  
   C. Compulsory dissolution  
   D. Voluntary dissolution  
ANSWER: D

9. The minimum number of members required to form a private limited company are  
   A. 5  
   B. 6  
   C. 3  
   D. 2  
ANSWER: D

10. Which out of these is not an advantage of a company form of organization?  
    A. Limited liability  
    B. Transferability of shares  
    C. Instability  
    D. Efficient professional management  
ANSWER: C

11. Essential feature of an ideal form of ownership is  
    A. Ease of formation  
    B. Limited liability  
    C. Transferability of interest  
    D. All of the above  
ANSWER: D
12. Which out of these is not a type of promoter?
   A. Voluntary promoter
   B. Professional promoter
   C. Accidental promoter
   D. Technical promoter

   ANSWER: A

13. Contents of a memorandum include
   A. Situation clause
   B. Objects clause
   C. Liability clause
   D. All of the above

   ANSWER: D

14. Which of these is not considered while choosing a form of business
   A. Size and area of operation
   B. Number of promoters
   C. Tax liability
   D. Degree of desired control

   ANSWER: B

15. Which out of these is a stage in promotion of a company?
   A. Discovery of business idea
   B. Investigation and verification
   C. Assembling
   D. All of the above

   ANSWER: D

16. Which of these is not a reason for survival of sole proprietorship?
   A. Human inertia
   B. Limited managerial skills
   C. Desire for independence
   D. Nature of market

   ANSWER: B

17. Features of Joint Hindu Family include
   A. Membership by birth
   B. No need for registration
   C. Management by the Karta
   D. All of the above

   ANSWER: D

18. In a Government company the minimum percent of paid up capital to be held by the government is
   A. 55%
B. 53%
C. 51%
D. 50%
ANSWER: C

19. The minimum number of members required to form a public limited company are
A. 5
B. 3
C. 6
D. 7
ANSWER: D

20. Limitations of a cooperative society include
A. Incompetent management
B. Limited financial resources
C. Mutual rivalries
D. All of the above
ANSWER: D

21. Identify which ONE of the following statements is NOT true?
A. A partnership only comes into existence once it starts trading.
B. A partnership created for a one-off transaction will cease after that transaction is complete. Partnerships cannot be formed for altruistic or benevolent purposes.
C. A person can be a partner even if he does not share in the profits of the partnership.
ANSWER: A

22. Which of these is not considered while choosing a form of business
A. Size and area of operation
B. Number of promoters
C. Tax liability
D. Degree of desired control
ANSWER: B

23. Upon dissolution, once the losses of the partnership have been paid, the remaining assets must be applied in a set order. What should these assets be used to pay first?
A. Outside creditors.
B. The costs of dissolution.
C. Repay any loans made by partners to the firm.
D. Repaying the partners for any capital contributions that they made.
ANSWER: A

24. Which statement is most accurate with respect to partnerships?
A. A partnership is a separate legal entity
B. General partners have unlimited liability
C. Partners are not agents for the firm
25. When an agent acts for a principal to enter a contract with a third party, the parties to the contract thus formed are
   A. The principal and the agent
   B. The principal and the third party
   C. The agent and the third party
   D. The principal, the agent, and the third party
   ANSWER: D

26. The best definition of a sole trader form of business organisation is:
   A. The business only employs one person
   B. The business is owned by one person
   C. The firm has a single customer
   D. There is a single firm in the industry.
   ANSWER: B

27. One of the claimed advantages of a sole trader business is that:
   A. Owners have limited liability
   B. Shares can be sold to raise capital
   C. Decisions and responsibilities can be shared
   D. The owner has independence
   ANSWER: D

28. One of the disadvantages of a sole trader business is that:
   A. Capital is limited to owner’s savings and bank loans
   B. Decisions take too long to make
   C. As they are government owned there is no profit motive
   D. The owners may disagree.
   ANSWER: A

29. What is an advantage of forming business partnerships with other firms?
   A. All partners always have limited liability
   B. Shares can be sold on the Stock Exchange
   C. The business survives the death of the partners
   D. The business has access to more capital than a sole trader.
   ANSWER: D

30. Which of the following is not a feature of a private limited company?
   A. Shares can be issued to raise capital.
   B. Shares can be bought and sold on the Stock Exchange.
   C. All owners of the business have limited liability.
   D. The business continues after the death of shareholders.
   ANSWER: B
31. Which of the following statements best applies to a public limited company (plc)?
A. It is owned by the government and is in the public sector.
B. It is owned by shareholders who can sell their shares in the Stock Exchange.
C. It is quick and easy to set up with few legal formalities.
D. Its accounts can be kept private and it receives little coverage in the business.

ANSWER: B

32. What is the main reason that the owners of many private limited companies convert them into public limited companies?
A. They do not want to remain in the private sector
B. They want to gain the benefits of limited liability
C. They want to keep the annual accounts secret
D. They want to raise additional capital to expand the business.

ANSWER: D

33. One of the main drawbacks of many public limited companies is that:
A. There can be a loss of control by the original owners as additional shares are sold
B. Firms in the public sector are often less efficient
C. If the company were to fail the shareholders could lose all of their assets
D. Workers have to be asked for their opinions before major decisions are taken.

ANSWER: A

34. Which of the following statements about most public limited companies is true?
A. They are owned and controlled by the workers.
B. They are owned by the directors but controlled by the shareholders.
C. They are owned by shareholders but controlled by directors.
D. They are owned and controlled by the government.

ANSWER: C

35. Which of the following statements about co-operative business organisations is true?
A. All co-operatives are only concerned with retailing.
B. Profits are shared equally amongst members.
C. They are owned by shareholders.
D. Workers have no say in decision-making.

ANSWER: B

36. A corporate manager who starts a new initiative for their company which entails setting up a new distinct business unit and board of directors can be regarded as?
A. Ecopreneur
B. Technopreneur
C. Intrapreneur
D. Social Entrepreneur

ANSWER: C

37. Family business always interested to handover the change of his business to:
A. Indian Administration Officers
B. Professional Managers
C. Next generation
D. None of the above
ANSWER: C

38. Venture capital is concerned with:
   A. New project having potential for higher profit
   B. New project of high technology
   C. New project having high risk
   D. All the above.
ANSWER: A

39. Why should an entrepreneur do a feasibility study for starting a new venture?
   A. To identify possible sources of funds
   B. To see if there are possible barriers to success
   C. To estimate the expected sales
   D. To explore potential customers
ANSWER: B

40. Which one of the following is the next stage to the Concept Stage of Product Planning and Development Process?
   A. Idea Stage
   B. Product Planning Stage
   C. Product Development Stage
   D. Test Marketing Stage
ANSWER: C

41. SBA stands for:
   A. Small business accountants
   B. Small business administration
   C. Small business adequacy
   D. Small business advisors
ANSWER: B

42. Information regarding all of the following is related to operations, EXCEPT:
   A. Location
   B. Promotion
   C. Raw materials
   D. Labor skills
ANSWER: C

43. The level at which an individual is viewed by society is called:
   A. Financial status
   B. Qualification
   C. Social status
   D. Achievement
44. Which one of the following is an important source of idea generation due to their familiarity with the needs of market?
   A. Existing products and services
   B. Distribution channels
   C. Federal government
   D. Consumers

   ANSWER: C

45. Members of distribution channels are excellent sources for new ideas because:
   A. They earn a handsome profit from new business
   B. They are familiar with the needs of the market
   C. They do not bother if entrepreneur bears a loss
   D. They have well-developed sales force

   ANSWER: B

46. Which one of the following is the most important characteristic of a successful business website?
   A. Innovation
   B. Speed
   C. Graphics
   D. Products

   ANSWER: B

II. SHORT ANSWER TYPE QUESTIONS:

1. What do you understand by the term entrepreneurship?
2. Distinguish between innovation and invention.
3. What important decisions are taken by an entrepreneur?
4. Explain the various types of entrepreneurs.
5. Explain the primary or regional factors affecting choice of plant location.
6. What factors need to be considered while selecting a site for setting up business?
7. Sole proprietorship is the simplest and oldest form of business organization. Do you agree? Give reasons.
8. What do you understand by Joint Hindu Family Business?
9. Explain the merits of Joint Hindu Family Business.
10. What are the essential features of a partnership firm?
11. How can a partnership be registered?
12. What are the demerits of a partnership firm?
13. Distinguish between a manager and a partner.
14. Distinguish between a company and partnership firm.
15. What are the salient features of a company?
16. What are the advantages of a private limited company?
17. What do you understand by a joint stock company?
18. What are the demerits of a joint stock company?
19. Distinguish between a cooperative and a company.
20. What do you understand by marketing cooperatives?
21. Distinguish between a private and a public limited company.
22. Who is a promoter of a company?
23. What are various types of promoters?
24. What is a Memorandum of Association?
25. What are Articles of Association?
27. Distinguish between a partnership and a company.
28. Enumerate three consequences of non-registration of a partnership firm.
29. List any five privileges available to any private company.
30. Distinguish between a company and a co-operative society.
31. Distinction between partnership and Joint Hindu family business
32. What do you mean by one-person company?
33. Short note on Types of partnership
34. Short note on Kinds of partners
35. Short note on Registration of firm

III LONG ANSWER TYPE QUESTIONS:

1. Discuss the functions performed by an entrepreneur.
2. Distinguish between an entrepreneur and a manager.
3. Explain Weber’s theory of plant location.
4. What are the various factors affecting choice of location of plant.
5. Explain the merits and demerits of sole proprietorship as a form of doing business.
6. What are the main forms of a business organization?
7. What are the merits and demerits of Joint Hindu Family Business?
8. Explain the salient features of partnership firm along with its demerits.
9. What are the various kinds of partners?
10. What are the various forms of dissolution of partnership?
11. Explain the salient features of a joint stock company.
12. Distinguish between a company and partnership.
13. What are the exemptions and privileges of a private company?
14. Explain the merits and demerits of company form of organization.
15. What are the various types of cooperatives?
16. What factors affect the choice of a form of business ownership?
17. Distinguish between a partner and a manager.
18. Distinguish between a private company and partnership.
19. Explain in detail the various stages in promotion of a company.
20. What are the procedural aspects related to promotion of a company?
21. Explain in detail the legal aspects related to promotion of a company.
22. Explain in detail the contents of Memorandum of Association.
23. What is the procedure for alteration of Memorandum of Association?
24. What do you understand by Articles of Association?
25. What is the procedure for alteration of Articles of Association?
26. A partnership firm has decided to expand its business which requires more capital and expertise. Should it take more partners or convert it into a private limited company? Give your advice with suitable arguments.

27. Describe the various kinds of partners in a partnership firm and discuss their rights and obligations.

28. What are the objectives of business enterprises in the public sector? Give reasons to justify government participation in commercial and industrial activities.

29. In what ways is the company form of organizing a public undertaking superior to the departmental form.

30. “One-man control is best in the world if that one man is big enough to manage everything”. Explain the statement.

31. What are the different forms of business organization? Discuss with strengths and weaknesses of each.

32. What is Ideal form of ownership?

33. What are the various factors affecting choice of ownership in business?

34. Is it possible to change the form of business ownership?

35. Distinguish between Partnership vs. private company

36. Write a detailed note on Limited Liability Partnership

UNIT-III

I MULTIPLE CHOICE QUESTIONS

1. Every financial market has the following characteristic:
   A. It determines the level of interest rates.
   B. It allows common stock to be traded.
   C. It allows loans to be made.
   D. It channels funds from lenders-savers to borrowers-spenders.

   ANSWER: D

2. Financial markets have the basic function of
   A. bringing together people with funds to lend and people who want to borrow funds.
   B. assuring that the swings in the business cycle are less pronounced.
   C. assuring that governments need never resort to printing money.
   D. both (A) and (B) of the above.
   E. both (B) and (C) of the above.

   ANSWER: A

3. Which of the following can be described as involving direct finance?
   A. A corporation’s stock is traded in an over-the-counter market.
   B. People buy shares in a mutual fund.
   C. A pension fund manager buys commercial paper in the secondary market.
   D. An insurance company buys shares of common stock in the over-the-counter markets.
   E. None of the above.
4. Which of the following can be described as involving direct finance?
   A. A corporation’s stock is traded in an over-the-counter market.
   B. A corporation buys commercial paper issued by another corporation.
   C. A pension fund manager buys commercial paper from the issuing corporation.
   D. Both (A) and (B) of the above.
   E. Both (B) and (C) of the above.

   ANSWER: E

5. Which of the following can be described as involving indirect finance?
   A. A corporation takes out loans from a bank.
   B. People buy shares in a mutual fund.
   C. A corporation buys commercial paper in a secondary market.
   D. All of the above.
   E. Only (A) and (B) of the above.

   ANSWER: D

6. Which of the following can be described as involving indirect finance?
   A. A bank buys a U.S. Treasury bill from one of its depositors.
   B. A corporation buys commercial paper issued by another corporation.
   C. A pension fund manager buys commercial paper in the primary market.
   D. Both (B) and (C) of the above.

   ANSWER: A

7. Financial markets improve economic welfare because
   A. they allow funds to move from those without productive investment opportunities to those who have such opportunities.
   B. they allow consumers to time their purchases better.
   C. they weed out inefficient firms.
   D. they do all of the above.
   E. they do (A) and (B) of the above.

   ANSWER: E

8. Which of the following are securities?
   A. A certificate of deposit
   B. A share of Texaco common stock
   C. A Treasury bill
   D. All of the above
   E. Only (A) and (B) of the above

   ANSWER: D

9. Which of the following statements about the characteristics of debt and equity are true?
   A. They can both be long-term financial instruments.
   B. They both involve a claim on the issuer’s income.
C. They both enable a corporation to raise funds.
D. All of the above
E. Only (A) and (B) of the above

ANSWER: D

10. The lending ability of commercial bank increases when
A. Reserve ratio is increased
B. RBI credit is reduced
C. RBI sells government securities
D. None of the above

ANSWER: D

11. RBI issues currency noted under
A. Minimum reserve system
B. Proportional reserve system
C. Maximum issue system
D. None of the above

ANSWER: A

12. At present, the apex institution with regard to rural credit is
A. RBI
B. NABARD
C. ARDC
D. SBI

ANSWER: B

13. Which of the following in India is an exchange bank?
A. ICICI bank
B. CITI bank
C. EXIM bank
D. UCO bank

ANSWER: B

14. Exchange banks specialize in:
A. Financing foreign trade
B. Promoting foreign investment
C. Financing domestic trade
D. All the above

ANSWER: A

15. The IDBI was started in
A. 1949
B. 1964
C. 1982
D. 1962

ANSWER: B
16. The declining profits made banks to undertake the business of:
   A. Merchant banking
   B. Mutual funds
   C. Venture capital
   D. all of the above
   ANSWER: D

17. Retail banking means granting loans for:
   A. Construction of houses
   B. Purchases of consumer durables
   C. Educational purposes
   D. All of these
   ANSWER: D

18. Investment banking was developed by
   A. Japan
   B. England
   C. USA
   D. None of the above
   ANSWER: B

19. Financial markets are used for trading:
   A. Both real assets and financial assets.
   B. The goods and services produced by a firm.
   C. Securities, such as shares.
   D. The raw materials used in manufacturing.
   ANSWER: C

20. The term "capital structure" refers to:
   A. The choice between equity and debt financing
   B. The length of time needed to repay debt.
   C. Whether the firm invests in capital budgeting projects.
   D. Which specific assets the firm should invest in.
   ANSWER: A

21. The primary distinction between securities sold in the primary and secondary markets is:
   A. Riskiness of the securities.
   B. Price of the securities.
   C. Previous issuance of the securities.
   D. Profitability of the issuing corporation.
   ANSWER: C

22. The money market is a(an) _____ market, while the capital market is a(an) _____ market.
   A. Investment; liquidity
   B. Short-term; long-term
   C. Liquidity; financial institution
23. The minimum, acceptable rate of return on corporate investments is determined by:
   A. Investors in financial markets.
   B. Information from accounting statements.
   C. The financial manager.
   D. The senior managers of the company.
   ANSWER: A

24. All but one of the following is a service provided to corporations by financial markets and intermediaries?
   A. Payments services
   B. Contracts to manage risk
   C. Liquidity
   D. Real investments
   ANSWER: D

25. While corporations provide shareholders returns from ________, capital markets provide returns to shareholders from ________?
   A. Capital gains; dividends
   B. Appreciation; capital gains
   C. Dividends; capital gains
   D. Earnings; capital appreciation
   ANSWER: C

26. Which one of the following is a regarded as classic venture capital?
   A. MBO finance
   B. Early stage
   C. Institutional
   D. Corporate
   ANSWER: B

27. A factor affecting the growth of VC finance
   A. Culture and environment
   B. Interest rates
   C. Easing stock market barriers
   D. Increased business banking finance
   ANSWER: A

28. Which of the following may attract VC funding?
   A. A lifestyle company
   B. A family company
   C. A high tech company with global markets
   D. A low tech company without global markets
   ANSWER: C
29. VC companies may specialise in order to reduce
   A. Administrative costs
   B. Search costs
   C. Marketing costs
   D. Information costs
   ANSWER: D

30. Money market where debt and stocks are traded and maturity period is more than a year
    is classified as
   A. shorter term markets
   B. capital markets
   C. counter markets
   D. long-term markets
   ANSWER: B

31. Type of market in which securities with less than one year maturity are traded, is
    classified as
   A. money market
   B. capital market
   C. transaction market
   D. global market
   ANSWER: A

32. In primary markets, property of shares which made it easy to sell newly issued security is
    considered as
   A. increased liquidity
   B. decreased liquidity
   C. money flow
   D. large funds
   ANSWER: A

33. In capital markets, major suppliers of trading instruments are
   A. government and corporations
   B. liquid corporations
   C. instrumental corporations
   D. manufacturing corporations
   ANSWER: A

34. Markets in which new securities are issued by corporations to raise funds are called
   A. primary markets
   B. secondary markets
   C. Gross markets
   D. proceeds market
   ANSWER: A
35. External sources of finance do not include:
   A. retained earnings
   B. leasing
   C. overdrafts
   D. debentures
   
   ANSWER: A

36. In finance, we refer to the market where new securities are bought and sold for the first time:
   A. Money market
   B. Capital market
   C. Primary market
   D. Secondary market
   
   ANSWER: C

37. Which one of the following can issue the corporate bond?
   A. Individuals
   B. Government
   C. Public limited companies
   D. All of before

   ANSWER: C

38. Which is the treasurer’s responsibility for managing the firm’s cash and marketable securities?
   A. Planning its capital structure
   B. Overseeing the corporate pension fund
   C. Selling stocks and bonds to raise capital
   D. All of the above

   ANSWER: D

39. Which of the following is the activity which finance people are involved?
   A. Investing decisions
   B. Marketing decisions
   C. Promotion decisions
   D. None of Above

   ANSWER: A

40. What should be the long-term focal point of financial management in a firm?
   A. The number and types of products or services provided by the firm
   B. The creation of value for shareholders
   C. The minimization of the amount of taxes paid by the firm
   D. The profits earned by the firm

   ANSWER: B

41. Financing decision determines?
   A. Current asset
B. Fix asset
C. Equity
D. Mix of finance
ANSWER: D

42. Profit maximization is a?
   A. Long term concept
   B. Short term concept
   C. Both a & b
   D. None
   ANSWER: B

43. What are the three interrelated areas of finance?
   A. Financial markets, option and forwards
   B. Banking, financial institutions and swap currency
   C. Investment, Financial management and Financial market & Financial institution
   D. All of above
   ANSWER: C

44. Which of the following is not normally a responsibility of the controller of the modern corporation?
   A. Budgets and forecasts
   B. Asset management
   C. Financial reporting
   D. Cost accounting
   ANSWER: B

45. Financial decisions are concerned with which of the following?
   A. Making investment decisions that optimize economic value
   B. Making asset management decisions that optimize economic wealth
   C. Raising capital that is needed for growth
   D. All of the above
   ANSWER: D

II SHORT ANSWER TYPE QUESTIONS:

1. Define Money Market. Name the institutions in the primary market.
2. Explain in brief the difference between money market and capital market
3. What is Net Asset Value (NAV)?
4. Explain the concept of entry and exit load in mutual funds?
5. What are the advantages of AMCs?
6. What do you mean by close ended and open-ended scheme?
7. Explain the collateral securities?
8. Outline various types of life insurance.
9. What are the monetary functions of the Reserve Bank of India?
10. Explain in brief currency chest.
11. What is SEBI? What are the objectives and functions of SEBI?
12. List the main functions of the Reserve Bank of India as per the Reserve Bank of India Act 1934.
13. State the guidelines issued by SEBI relating to free pricing of shares?
14. Write a short note on merchant banking.
15. Explain in brief venture capital.
16. How have the structure and growth of NBFCs taken place post liberalization?
17. Compare the functions of merchant banking with the commercial banking in India.
18. What do you mean by credit rating? Analyze the important features of credit rating business in India.
19. What do you mean by hypothecation?
20. What do you mean by consortium advances?
21. Explain the prime lending rate with an example.
22. Write a note on growing Non-Performing Asset (NPAs) in banks.
23. What is MPBF? Discuss its relevance in the present times.
24. By giving suitable examples, explain the risk-return trade off.
25. Explain Capital adequacy norms in detail.
26. What is meant by optimum capital structure?
27. State any four features of an appropriate capital structure of a company.
28. State any three objectives and aspects of financial planning.
29. Distinguish between capitalization and capital structure.
30. Explain any three effects of undercapitalization on a company.
31. Explain long terms sources of finance in brief.
32. Explain short term sources of finance in brief.
33. What do you mean by owned capital concept?
34. Explain the functions of SEBI in brief.
35. What are capital markets?

III LONG ANSWER TYPE QUESTIONS:

1. Discuss the dynamics of a mutual fund.
2. Critically examine role of SEBI as regulatory body in capital market reforms during the last decade.
3. Describe the power of the Reserve Bank of India over banking companies?
4. What is Securities contract (Regulation) Act? What are the principal objectives of passing this Act? What are the powers delegated to SEBI under the Act?
5. “Reserve Bank of India acts as a promoter of the financial system”. Justify.
6. Explain the organization of SEBI. What are the guidelines issued by SEBI regarding Companies Act?
7. What are the important departments of the Reserve Bank of India? Explain their main functions.
8. Explain the importance of RBI as the regulator of Banks in current financial scenario in India.
9. What do you mean by close ended and open-ended scheme?
10. Explain the collateral securities?
11. Outline various types of life insurance.
12. What are the monetary functions of the Reserve Bank of India?
13. Explain in brief currency chest.
14. What is SEBI? What are the objectives and functions of SEBI?
15. List the main functions of the Reserve Bank of India as per the Reserve Bank of India Act 1934.
16. State the guidelines issued by SEBI relating to free pricing of shares?
17. Explain the development of UTI in India.
18. Bring out the differences between Capital Market and Money Market.
19. What are various components of money market? Discuss the features of each?
20. What are the deficiencies in Indian Money Market?
21. What are the features of Call Money Market in India? Discuss its functioning.
22. How has the Call Money Market in India changed over years due to various reforms implemented?
23. What are the features, procedures for issue of commercial paper in India?
24. What are the features of (Certificate of Deposits) CDs and what have been the reforms in the development of CD market in India?
25. What are the reasons for an underdeveloped CD market in India?
26. What is meant by financial planning? What factors should be kept in mind while formulating a financial plan?
27. What is meant by capital structure? Explain briefly the factors affecting the capital structure of a company.
28. Describe the advantage of borrowed capital as compared with those of ownership capital.
29. Explain the importance of finance in modern business.
30. What are money markets? Discuss various instruments used in money market stating their important features.
31. What is loan syndication as a source of finance? Explain the stages involved in loan syndication.
32. What are the various factors affecting Factors affecting capital structure?
33. Explain the concept of Recent Trends in Financing and its Applicability in the present-day context.
34. Explain the difference between Venture capital and Private Equity in detail.
35. Explain the concept of Private equity in detail.

UNIT-IV

I MULTIPLE CHOICE QUESTIONS:

1. The most common route for investments by MNCs in countries around the world is to
   A. set up new factories
   B. buy existing local companies
   C. form partnerships with local companies
   D. Through sole proprietorship
   ANSWER: C

2. Globalization has led to higher standards of living of
   A. well-off consumers
B. poor consumers  
C. big producers  
D. small producers  

ANSWER: A

3. Government can make globalization more 'fair' by  
   A. increasing competition  
   B. increasing employment  
   C. implementing the labor laws  
   D. imposing trade barriers  

ANSWER: C

4. A company that owns or controls production in more than one nation is called  
   A. multinational corporation  
   B. joint stock company  
   C. global company  
   D. none of these  

ANSWER: A

5. Where do MNCs choose to set up production?  
   A. Cheap goods  
   B. Cheap labor resources  
   C. Economic sustainability  
   D. None of these  

ANSWER: B

6. Ford Motors entered the Indian automobile business in collaboration with which Indian manufacturer?  
   A. Mahindra and Mahindra  
   B. Tata Motors  
   C. Maruti Suzuki  
   D. Hindustan Motors  

ANSWER: A

7. Trade between countries  
   A. determines prices of products in different countries  
   B. decreases competition between countries  
   C. makes a country dependent on the other  
   D. none of these  

ANSWER: A

8. Globalization by connecting countries leads to:  
   A. lesser competition among producers  
   B. greater competition among producers  
   C. no competition between producers  
   D. none of these  

ANSWER: B
9. One major factor that has stimulated the globalization process is
   A. effective utilization of resources
   B. increase in income and wealth
   C. willingness to cooperate
   D. rapid improvement in technology
   ANSWER: D

10. Which out of the following is an example of a trade barrier?
    A. Foreign investment
    B. Delay or damage of goods
    C. Tax on imports
    D. None of these
    ANSWER: C

11. New small business owners have which of the following two common motivations?
    A. Be their own bosses, greater reward potential
    B. Achieve dependence, less reward potential
    C. Achieves dependence, become a stakeholder
    D. Be their own bosses, lower reward potential
    ANSWER: A

12. An advantage of the small firm in the innovation process?
    A. Ability to carry out R&D
    B. Ability to raise finance
    C. Ability of the entrepreneur to carry out multiple tasks
    D. Ability of the entrepreneur to act on new ideas or product development
    ANSWER: D

13. According to development commissioner a sick company should have:
    A. Less than 50% capacity utilization
    B. More than 50% erosion in net worth
    C. Unit has remained closed for a period of more than six months
    D. Bank financing is restricted to 25% of net worth.
    ANSWER: D

14. Incipient sickness is not an indication of:
    A. Continuous cash losses from year to year and trend is expected to continue in future
    B. Continuous losses for last two years
    C. Deterioration in the current ratio
    D. Gradual erosion in the networth during the previous and current financial years
    ANSWER: B

15. Which of the following was NOT one of the classifications of entrepreneurs presented in our text?
    A. Franchise entrepreneur
B. Classic entrepreneur  
C. Multipreneur  
D. Intrapreneur  
ANSWER: A

16. The primary reason entrepreneurs start companies is to:  
A. prove they could do it  
B. recover from a layoff  
C. create something new  
D. make money  
E. control their own lives  
ANSWER: C

17. One study found that entrepreneurs tend to demonstrate all of the following traits except:  
A. opinionated  
B. emotionally aloof  
C. calm  
D. focused  
E. aggressive  
ANSWER: E

18. One reason for the growth in small businesses relates to the trend for larger business to downsize by contracting with smaller firms to do many of the functions once done internally. This is referred to as:  
A. contracting  
B. outsourcing  
C. specializing  
D. entrepreneur  
ANSWER: A

19. The technical characteristics of the small business would include all of the following except:  
A. independently managed  
B. owned by an individual or a small group of investors  
C. based locally, even though the market might be widespread  
D. significant influence in its industry  
ANSWER: B

20. What is the process by which individuals pursue opportunities without regard to resources they currently control?  
A. Startup management  
B. Entrepreneurship  
C. Financial analysis  
D. Feasibility planning  
ANSWER: B
21. The financial assistance to small business provided by the Small Business Administration takes the form of:
   A. direct loans
   B. guidance in locating lenders
   C. loan guarantees
   D. assistance in filling out paperwork
   ANSWER: D

22. Key features of a well written business plan would include all of the following except:
   A. financial plan
   B. description of the product
   C. an analysis of the market
   D. a review of the advertising firms analyzed
   E. qualifications of the owner
   ANSWER: E

23. _____ involves dissolving or reorganizing a business under the protection of bankruptcy legislations.
   A. Reengineering
   B. Downsizing
   C. Bankruptcy
   D. Expansion
   ANSWER: A

24. Valuation techniques generally fall into any of the following categories EXCEPT:
   A. Asset valuations
   B. Earnings valuations
   C. Cash flow valuation
   D. Depreciation valuation
   ANSWER: B

25. Which of the following agencies was created specifically to foster the creation, growth, and expansion of minority-owned businesses in the United States?
   A. SCORE
   B. Minority Business Development Agency
   C. The World Trade Organization
   D. The Federal Reserve
   ANSWER: D

26. Which sectors do small businesses tend to operate in successfully?
   A. Aerospace and Defence
   B. Pharmaceuticals
   C. Oil and gas
   D. Restaurants and Cafés
   ANSWER: D
27. What are weaknesses of small firms?
   A. Closeness to the customer
   B. Understanding of local culture
   C. Lack of ability to influence the business environment
   D. Lack of bureaucracy within the firm and low overheads

   ANSWER: C

28. Which of the following was not cited as a reason for starting a new business?
   A. independence.
   B. challenge.
   C. profit.
   D. increase of leisure time.

   ANSWER: D

29. Which of the following is not a characteristic of a small business?
   A. independently owned and operated.
   B. dominant in its field.
   C. meets certain standards in terms of size.
   D. all of the above.

   ANSWER: B

30. Which of the following is not a common reason for small-business failure?
   A. lack of interest.
   B. lack of necessary personnel.
   C. lack of experience.
   D. poor allocation of time.

   ANSWER: A

31. Which characteristic would likely be found in an industry dominated by small business firms?
   A. little capital required.
   B. capital intensive.
   C. labour intensive.
   D. none of the above.

   ANSWER: A

32. ASSOCHAM has offered to set up which body containing information about electronic transactions used by the government for official purposes?
   A. National Data Bank
   B. National Database Bank
   C. National Digit Bank
   D. None of the above

   ANSWER: A
33. India's food processing sector has the potential to attract $33 billion investment by 2024, according to a study by which trade body?
   A. ASSOCHAM
   B. Nasscom
   C. FICCI
   D. IMC

   ANSWER: A

34. The first woman to head Federation of Indian Chambers of Commerce and Industry (FICCI) is __:
   A. Vinita Bali
   B. Chanda Kochhar
   C. Anu Aga
   D. Naina Lal Kidwai

   ANSWER: D

35. What is one of the major objectives of SIDBI?
   A. Principal Financial Institution for Promotion, Financing and Development of Agriculture sector in India
   B. Principal Financial Institution for Promotion, Financing and Development of Housing sector in India
   C. Principal Financial Institution for Promotion, Financing and Development of Export sector in India
   D. Principal Financial Institution for Promotion, Financing and Development of MSME sector in India

   ANSWER: D

36. MNCs have a world management based on
   A. Subsidies
   B. Trade
   C. Production
   D. Industries

   ANSWER: A

37. Relationships among world state is structured according to certain rules and system of interactions is known as
   A. IR
   B. International Politics
   C. International system
   D. International scientist

   ANSWER: B

38. Government can make globalization more ‘fair’ by:
   A. increasing competition
   B. increasing employment
   C. implementing the labour laws
D. imposing trade barriers
ANSWER: C

39. Fair globalization would mean:
   A. fair opportunities for all
   B. fair benefits for all
   C. more support to small producers
   D. all of the above
ANSWER: D

40. Globalization opportunities for paid work for women has denied them:
   A. good health
   B. good education
   C. permanent job
   D. none of these
ANSWER: C

41. With the growing competition, most employers these days prefer to employ workers:
   A. flexibly
   B. quickly
   C. selectively
   D. none of these
ANSWER: A

42. Globalization has posed major challenges for:
   A. big producers
   B. small producers
   C. rural poor
   D. none of these
ANSWER: B

43. One major government initiative to attract foreign companies to invest in India is:
   A. to raise the standard of education
   B. to promote unemployment in the public sector
   C. to build special economic zones
   D. both (a) and (c)
ANSWER: C

44. Globalization has created new opportunities of:
   A. employment
   B. emerging multinationals
   C. providing services
   D. all of the above
ANSWER: D

45. Removing barriers or restrictions set by the government is called:
II SHORT ANSWER TYPE QUESTIONS:

1. Define small business and explain its characteristics.
2. What is in your opinion the rationale behind the development of small-scale industries in India?
3. Discuss the objectives of Small-Scale Industries.
4. Explain the types of Small-Scale Industries.
5. Explain the importance of Small business as a seedbed of entrepreneurship.
6. Discuss the role of Small Business in Indian economy.
7. Describe the main problems faced by Small-scale industries in India.
8. Explain the growth of Small-Scale Sector in India after independence.
9. Is the government policy towards Small SCALE Sector “protectionist” in nature?
10. Substantiate main features of an effective and workable business plan.
11. Discuss various formalities for registering small scale unit.
12. SSI plays dynamic role in economic development of India. Comment.
13. Discuss network planning techniques.
14. Discuss planning commission guidelines for feasibility report.
15. Explain the protective measures taken by the government to ensure longevity of small business.
16. What is NISC? How does it work to help small business enterprises?
17. Is there a need for any national policy towards small business enterprises?
18. Describe the various policies and programmes of the Government of India for fostering the growth and development of Small-Scale Sector in the country.
19. Write a note on Institutional support for the promotion of small enterprises in India.
20. Discuss the role of non-financial institutions in promotion of small enterprise sector of the country.
21. Discuss the advantages of ‘lease financing’.
22. Assess the role of SIDCO in uplifting the Small-Scale Industries.
23. What are the “DISTRICT INDUSTRIES CENTRE”? What are its functions?
24. Explain the functions of State Financial Corporation.
25. What are the various incentives offered by the State and Central Governments for the promotion and growth of small-scale industries in India?
26. Explain the Role of MNCs and TNCs in India.
27. Discuss briefly the managerial problems of small-scale industry in India.
28. Appraise critically the criteria followed for defining the small-scale sector in India.
29. Explain the mission and goals of ASSOCHAM.
30. Write a note on the role of FICCI as a form of business combination.
31. What are the Quantitative criteria to become a Small-Scale Industry in India?
32. Explain the status of Small business in India in 2020.
33. Explain the characteristics of small business in brief.
III LONG ANSWER TYPE QUESTIONS:

1. What do you understand by small business enterprise? Discuss in detail their characteristics.
2. What role do small industries play in the development of the Indian economy?
3. What is the rationale behind public sector enterprises? What kind of activities is pertinent to them?
4. What are the problems faced by the small-scale industries in India?
5. What steps has the government taken in the recent years to secure the well-being of small scale industries in India?
6. Explain in detail the steps taken by the government to address the problems faced by the small-scale industries.
7. Trace the history of growth of the small-scale industries in India.
8. ‘The government has failed to protect the interest of the small-scale industries in India’. Do you agree? Give your views on the above statement.
9. Is there a need for a national policy for the betterment of the small-scale industries?
11. What is the role of small industries development bank of India?
12. Explain in detail the functions of SIDBI.
13. “The chief problem of SSI’s in India is that of Marketing and not Production” explain.
14. Explain in detail the functions and role of SIDO in the production and development if Small Scale Industries.
15. Give a critical appraisal of industrial estates in promoting Small business in India.
16. Why today organizations give emphasis on the development of human resource into competitive advantage?
17. How Financial aspect of the industries are taken care of. Discuss
18. How export marketing helps in the upliftment of various industries in India.
19. “Diversification may be riskier as compared to expansion”. Discuss. What are the practical problems faced in expansion and diversification?
20. Discuss the assistance provided by various financial and non-financial institutions.
21. Do you think that reservation policy is beneficial to the growth of small scale sector?
22. Give an account of the role of Government in developing rural entrepreneurship in India.
23. What do you mean by Institutional support system? Examine the present position of Institutional support system available to MSE’s in India? Out of these what are the Institutional Sources Financing Small Business Enterprises in India?
25. Discuss the purpose and main services provided by NSIC of India?
26. What is small business? Define MSMEs as per MSMED Act of 2006. Discuss rationale of MSME and government policy towards promoting small business in India.
27. Explain the role of FICCI, CII, ASSOCHAM and other institutions in industrial and economic growth of India.
29. Explain the role of the Small Industries Development Bank of India in the promotion of small-scale sector in our country.

30. “Small is always beautiful”. On the basis of this statement, state the reasons for the survival of small business units in the present-day environment of huge multinational companies.


32. Explain the growth of public enterprises in India in detail.

33. Explain the problems of public enterprises in detail.

34. Elaborate on the concept of Joint sector in detail.

35. Elaborate on Privatization of public enterprises in detail.