EXAMINATION MATERIAL ZUEB - 2022

BUSINESS MATHEMATICS XI (COMMERCE).

SECTION "A"   MULTIPLE CHOICE QUESTION (MCQ'S)

CHAPTERS NAME	MCQs (Multiple Choice Question

CHAPTER 1
 	
INTRODUCTION
	1. The number 0, 1, 2, 3, 4…. are called.
	   a. Natural numbers.
	   b. Odd numbers
	   c. **Whole numbers.**
	   d. Even numbers.
	
	2. The number 1, 2, 3, 4…. are called.
	   a. Even numbers.
	   b. Whole numbers
	   c. **Natural numbers**
	   d. Odd numbers.
	
	3. The number -3, -2, -1, 0, 1, 2, 3 are called.
	   a. Whole numbers.
	   b. Natural numbers
	   c. **Integers.**
	   d. Even numbers
	
	4. $\sqrt{16} + \sqrt{9}$ =
	   a. 25
	   b. 144
	   c. **7**
	   d. 5
	
	5. $(-3)^4$ =
	   a. -81.
	   b. -12
	   c. **81.**
	   d. 12.
	
	6. A number with 1 index is always
	   a. One
	   b. Zero
	   c. Square of that number
	   d. **The same number**

	7. A number with zero index is equal to;
	   a. Zero
	   b. Same number
	   c. **One**
	   d. two
	
	8. $a^2 - b^2 =?$
	   a. $(a - b)(a - b)$
	   b. $(a + b)(a + b)$
	   c. **$(a - b)(a + b)$**
	   d. $(b + a)(b + a)$

CHAPTER 2
 	
RATIO, PROPORTION AND PERCENTAGE:
	9. 17% of 300 is
	   a. **51**
	   b. 34
	   c. 17
	   d. 50
	
	10. If 12 men can do piece of work in 12 days, 6 men will do the same work in days?
	   a. 6
	   b. 12
	   c. **24**
	   d. 72
	
	11. The ratio of 150cm to 3m is
	   a. 50: 1
	   b. **1: 2**
	   c. 2: 1
	   d. 4: 2
	
	12. Equality of two ratios is called;
	   a. Ratio
	   b. Compound
	   c. Quantity
	   d. **Proportion**
	
	13. If Selling Price is greater than Cost Price then it has a
	   a. Loss
	   b. **Profit**
	   c. Neither profit or loss
	   d. Interest
	
	14. More money, more shopping is an example of
	   a. **Direct Proportion**
	   b. Inverse Proportion
	   c. Neither Direct nor Inverse Proportion
	   d. Compound Proportion

15. Problems involving more than two ratios, the proportion is said to be
    a. Direct
    b. Indirect
    c. **Compound**
       Inverse

16. The ratio of 2 hours to 45 minutes is
    a. 2: 45
    b. **8: 3**
    c. 2: 9
    d. 4: 3

17. The ratio of 5 feet to 30 inches is:
    a. **2: 1**
    b. 1: 2
    c. 1: 6
    d. 6: 1

18. Larger the number of laborers, lesser will be the time taken to do a certain work is an example of;
    a. Direct proportion
    b. **Inverse proportion**
    c. Neither direct nor inverse proportion
    d. Compound proportion

19. 14% of 200 + 28 % of 200 is?
    a. 42
    b. **84**
    c. 46
    d. 48

20. 210 is 7% of:
    a. 1000
    b. 2000
    c. **3000**
    d. 4000.

21. $\frac{3}{8}$ in percentage form is
    a. 45 %
    b. **37.5%**
    c. 0.375
    d. 35%.

22. If Cost Price is greater than Selling Price then it has a
    a. Neither profit or loss
    b. Profit
    c. **Loss**
    d. Discount price

	23. Profit or loss is always calculated on
	   a. Selling Price
	   b. **Cost Price**
	   c. Both Cost Price and Selling Price
	   d. Invoice Price.
	
	24. The ratio of 30 minutes of 1.5 hours is
	   a. **1: 3**
	   b. 3: 1
	   c. 2: 4
	   d. 4: 2

CHAPTER 3
 	
INTEREST & ANNUITIES:
	25. When the interest in computed only on principle for the entire period, it is called.
	   a. Compound Interest
	   b. Annuity
	   c. **Simple Interest.**
	   d. Interest Rate
	
	26. The interest for each time period is added to the period before interest is computed for the next time period is called:
	   a. Compound interest
	   b. Simple interest
	   c. Interest rate.
	   d. **Annuity**
	
	27. When interest is added to the principal more than once a year it is called
	   a. **Multiple compounding**
	   b. Compound amount
	   c. Rate of interest
	   d. Annuity.
	
	28. Compound amount is called:
	   a. Discount value
	   b. **Future value**
	   c. Present Value
	   d. Face value.
	
	29. The principal amount is also called;
	   a. Price value
	   b. **Present value**
	   c. Compound amount
	   d. Accumulated value
	
	30. A fixed amount of money that is paid or received at equal intervals of time is called
	   a. Multiple compounding
	   b. Compound amount
	   c. **Annuity**
	   d. Proceed

	31. Amount of annuity is also called
	    a. **Future value of annuity**
	    b. Present value of annuity
	    c. Past value of annuity
	    d. immediate annuity.
	
	32. Amount – interest =?
	    a. Price
	    b. Cost
	    c. **Principal**
	    d. Selling.
	
	33. If interest is computed on principal amount for the entire period it is called.
	    a. Annuity
	    b. Compound
	    c. **Simple interest**
	    d. Effective rate of interest
	
	34. Under annuity due, payment is due at the?
	    a. **Beginning of the time.**
	    b. End of the time.
	    c. At the middle of the time.
	    d. Each.
	
	35. What is the simple interest for Rs 10,000 for 2 years at 10% interest per annum.
	    a. 200.
	    b. 3000.
	    c. 4000.
	    d. **2000.**
	
	36. In calculation of interest 'n' stands for
	    a. Rate of interest
	    b. Amount
	    c. Principal
	    d. **No. of years**

CHAPTER 4
 	
FUNCTIONS AND THEIR GRAPHS.
	37. The place determined by the x and y axes is called
	    a. Horizontal plane
	    b. Vertical plane
	    c. **Co – ordinate plane**
	    d. Aero plane
	
	38. The slope of the horizontal line is
	    a. **0**
	    b. 1
	    c. 2
	    d. 3.

	39. Graph of linear equation Is also called graph of a;
	   a. **Parabola**
	   b. Slope
	   c. Straight line
	   d. Distance
	
	40. The points where parabola cuts x – axis is called
	   a. Coordinates
	   b. **Roots**
	   c. Points
	   d. Directions
	
	41. The turning point of the parabola is called
	   a. Intercept
	   b. Root
	   c. **Vertex**
	   d. Slope
	
	42. The quadrant in which both x and y are negative is called
	   a. Quadrant I
	   b. Quadrant II
	   c. Quadrant III
	   d. Quadrant IV
	
	43. The plane formed by. r - axis and y-axis is called
	   a. Vertical plane
	   b. **Co-ordinate plane**
	   c. Horizontal plane
	   d. Both a & b
	
	44. A function of the form $f(x) = ax^2 + bx + c$ is called
	   a. Cubic function
	   b. **Quadratic function**
	   c. Linear function
	   d. Simultaneous function

CHAPTER 5
 	
LINEAR &
QUADRATIC
EQUATION.
	45. The equation 2x + 3 = 8 is called
	   a. **Linear equation**
	   b. Quadratic equation
	   c. Incomplete equation
	   d. Cubic equation
	
	46. 2x + 5 = 13, then x =
	   a. 2
	   b. 5
	   c. **4**
	   d. 13
	
	47. A quadratic equation has always _____ roots.
	   a. One
	   b. **Two**
	   c. Three
	   d. Four

	48. A second-degree equation is also called
	  a. Cubic equation
	  b. **Quadratic equation**
	  c. Linear equation
	  d. Incomplete equation
	
	49. For the quadratic equation $2x^2 - 4x + 3 = 0$, the value of a =?
	  a. 4
	  b. 3
	  c. **2**
	  d. 4
	
	50. For the quadratic equation $x^2 - 5x + 6 = 0$, the value of b =?
	  a. 5
	  b. 1
	  c. **-5**
	  d. 6
	
	51. For the quadratic equation $2x^2 - x + 15 = 0$, the value of c =?
	  a. **-15**
	  b. -1
	  c. 15
	  d. 2
	
	52. In linear equation the highest power of the variable is;
	  a. **One**
	  b. Two
	  c. Three
	  d. Four

CHAPTER 6
BINARY
NUMBERS
	53. The number system we use in our daily life is based on
	  a. Seven digits
	  b. Eight digits
	  c. Two digits
	  d. **Ten digits**
	
	54. Decimal number system is also called
	  a. Binary system
	  b. Base two number system
	  c. **Denary system**
	  d. Natural system
	
	55. The binary number system has only;
	  a. One digit
	  b. **Two digits**
	  c. Three digits
	  d. Four digits
	
	56. The binary equivalent of a decimal number 9 is
	  a. 1101
	  b. **1001**
	  c. 1111
	  d. 1011

57. In a binary there are two digits 0 and 1. How many digits are in a decimal
   a. 5
   b. 8
   c. 9
   d. **10**

58. A number system is based on two basic concepts. They are digits and
   a. **Positions**
   b. Notations
   c. Decimals
   d. Binary

59. Binary system is also called;
   a. Base – zero system
   b. Base – one system
   c. **Base – two system**
   d. Base – three system

60. The binary equivalent of 0.4375 is:
   a. 0.01
   b. 0.10
   c. 0.101
   d. **0.0111**

61. The binary equivalent of decimal number 17 is:
   a. 10010
   b. **10001**
   c. 100010
   d. 101010

62. A number system is based on two basic concepts. They are Digits and?
   a. **Positions**
   b. Notations
   c. Decimals
   d. Fractions

63. The number system with 10 digits is called;
   a. **Decimal**
   b. Positions
   c. Notations
   d. Binary

CHAPTER 7
 	
MATRICES &
DETERMINANTS.
	64. If a matrix has 3 rows and 2 columns, then its dimension will be
	  a. 2 x 3
	  b. 3 + 2
	  c. **3 × 2**
	  d. 32.
	
	65. A matrix which does not have an inverse, is called
	  a. Transpose
	  b. Row matrix
	  c. **Singular**
	  d. Unit matrix

66. Cramer's Rule is also known as?
    a. Inverse Matrix Method
    b. Matrix Method
    c. **Determinant Method**
    d. Inverse Method

67. The idea of matrices was introduced by Arthur Caylet in
    a. 18th century
    b. **19th century**
    c. 20th century
    d. 21st century

68. The methods to solve a pair of simultaneous linear equations are;
    a. 3
    b. **2**
    c. 4
    d. 5

69. The law which does not hold in multiplication of matrices is known as
    a. Distributive law
    b. Inverse law
    c. Associative law
    d. **Commutative law**

70. A rectangular array of numbers arranged in rows and columns is called.
    a. **Arranged numbers**
    b. Determinant
    c. Matrix
    d. Transpose.

71. The matrix $\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$ is called.
    a. Complete matrix
    b. Identity matrix
    c. **Null matrix**
    d. Determinant.

72. The matrix A = $\begin{bmatrix} 2 & 3 & 5 \end{bmatrix}$ is called.
    a. Null matrix
    b. Square matrix
    c. Rectangular matrix
    d. **Row matrix.**

73. The matrix $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$ is called.
    a. Null matrix
    b. Zero matrix
    c. **Identity matrix**
    d. Determinant

74. A transpose matrix is denoted by?
   a. A
   b. I
   c. A^{-1}
   d. A^t

75. $A \times A^{-1}$ =?
   a. Null matrix
   b. Square matrix
   c. **Identity matrix**
   d. Singular matrix

76. A matrix of order 3 × 3 is called
   a. Square matrix
   b. Singular matrix
   c. Cubic matrix
   d. Matrix of order 9

77. An identity matrix is denoted by?
   a. A
   b. I
   c. A^{-1}
   d. A^t

78. An identity matrix is also called?
   a. Square matrix
   b. Singular matrix
   c. **Unit matrix**
   d. Null matrix