

Business Mathematics - 11th Class Business Math Full Book Short Questions Preparation

Q1. Write down rule of proportion that helps in finding missing term of given proportion.

Ans 1: Rule of proportion that helps in finding missing term of given proportion is: Product of extreme = Product of mean

Q2. Explain the annuity certain.

Ans 1: Annuity Certain: A financial instrument that provides a stream of payments for a predetermined number of years. An annuity certain will continue a stream of payment remitted to the annuitant's beneficiary or estate, if the annuitant dies before the payment term ends.

Q3. What is the range of the function?

Ans 1: Range of the Function: Range of the function is the "set of all definite output values" Range depends on the domain of the function.

Q4. Define Principal.

Ans 1: Principal: The amount of money that is initially lent or invested in any business deal is called the principal.

Q5. What is meant by interest?

Ans 1: Interest: Interest is just like a rent which is paid for having the use of money.

Ans 2: Explanation: Some corporations pay millions of rupees of interest each as for the use of money they have borrowed. We earn money on sums we have invested in saving accounts, certificates of deposits, and money market funds. We also pay for the use of money which we have borrowed for house loans, mortgages, or credit card purchases.

Q6. What is meant by conditional equation?

Ans 1: Conditional Equation: An equation that is true for some values of variables and not true of others.

Ans 2: Example: The equation $2x-14=0$ is conditional because it is only true for $x=7$. Other values for x do not satisfy the equation.

Q7. Define binary number system shortly.

Ans 1: **Binary Number System:** The number system with base 2 is known as binary number system.

Ans 2: Importance: The number system with base 2 is of particular importance due to its application in computer. The binary number "0" suggest to computer "off" and "1" "on".

Ans 3: Digits Involved: In binary number system only two digits "0" and "1" involve.

Q8. Write at least two key points of compound interest.

Ans 1: Important Key Points of Compound Interest: i) Principal keeps on changing from period to period.

Ans 2: ii) Amount of interest also keeps on changing from period to period.

Ans 3: iii) Rate of interest remains fixed for all periods.

Q9. What are different type of ratio?

Ans 1: Different type of ratio are given below:

Ans 2: i) Current Ratio

Ans 3: ii) Inventory Turnover Ratio (ITR)

Ans 4: iii) Total Assets Turnover Ratio (TATR)

Ans 5: iv) Debt Ratio(DR)

Q10. Define ordinary annuity.

Ans 1: Ordinary Annuity: An annuity is considered as to be ordinary annuity if every payment is made at the end of each payment period and continues for a definite period. This annuity is also called ending mode annuity.

Q11. Define perpetuity.

Ans 1: Perpetuity: An annuity is considered as to be perpetuity if each payment is made at the end of each payment period and continues for indefinite period.

Q12. What is square matrix.

Ans 1: Square Matrix: A matrix having equal number of rows and column is called square matrix.

Q13. Define null matrix

Ans 1: Null Matrix: If each every element of a matrix is zero than that matrix is called null matrix. Null matrix is also called zero matrix and denoted by "0"

Q14. Write any two basic arithmetic operations.

Ans 1: The four basic mathematics operations are:

Ans 2: i) Addition

Ans 3: 2) Subtraction

Ans 4: 3) Multiplication

Ans 5: 4) Division

Q15. Define degree of the equation.

Ans 1: Degree of the Equation: The degree of an equation is the highest power of its monomials (individual terms) with non-zero coefficients. The degree of a term is the sum of the exponents of the variable that appear in it, and thus non-negative integer

Ans 2: Examples: $x^3 + 3x^2 + 2 = 0$ Degree of equation is "3"

Ans 3: ii) $x^2 + 2x^2y^2 + y^2 = 0$ Degree of equation is "4"

Q16. What is amount or maturity value?

Ans 1: Amount Or maturity: Maturity value is the amount payable to an investor at the end of a debt instrument holding period (maturity date).

Ans 2: Example: For most bonds the maturity value is the face amount of the bond. For some certificates of deposit and other investment all of deposit and other investments all of the interest is paid at maturity.

Q17. Define identity matrix.

Ans 1: The unit of multiplicative identity of matrices are defined as. A scalar matrix in which principal diagonal elements are equal to "1" is called a unit or identity matrix"

Q18. Change into standard form 48:63:128.

Ans 1: 48:63:128 The given question is already in standard form. No further solution required. 48:63:128

Q19. Define row matrix and give one example.

Ans 1: Row Matrix: A matrix having single row but having any number of columns is called row matrix.

Example: $A = [3 \ 4 \ 5 \ 6]$

a row matrix, Row matrix is also called row vector.

Q20. Define an equation.

Ans 1: Equation:Equation in Mathematics is way of expressing equality of two expressing on the basis of logic and number.Example: $x + 2 = 5$ $x^2 + 3x + 2 = 0$