11ᵗʰ CLASS COMMERCE GROUP GUESS PAPER – 2022

BUSINESS MATHEMATICS.

2.   Write short answers to questions.

i)   Define proportion.

ii)   Define principal amount.

iii)   Define ordinary annuity.

iv)   What percentage of Rs. 120 is 84

v)   Define compound interest.

vi)   Find 40% of 300

vii)   What are the types of discount?

viii)   Write the formula for sum of ordinary annuity.

ix)   Define compound interest.

x)   Find the compound interest due in case of Rs. 1000/- loaned for 5 years at 6% annually.

xi)   Divide Rs. 4800 in the ratio 5: 7

3.   Write short answers to questions.

i)   Explain quadratic equation.

ii)   Write the formula of quadratic equation.

iii)   Define number system used in computer.

iv)   Find x if $2x - 7 = 13$

v)   Define Linear equations.

vi)   Convert $(35)_{10}$ in binary system.

vii)   Define singular and non –singular matrices.

ix)   Define reciprocal equations.

x)   Define row matrix

xi)   Convert $(1011)_2$ in to decimal number system.

SECTION – II

4.   A watch was sold for Rs. 850 on 4 ½ loss. Find the cost price of the watch.

5.   Find the compound interest in Rs. 5000 loaned for 6 years @ 12% per annum.

6.   Convert $5x + 2y = 10$ into intercepts form and identify x and y intercepts.

7.   Using Crammer's rule, solve the following system of linear equations: $3x + 2y = 12$
$x + 5y = 17$

8. $3x + 2y = 54$ by elimination method.
$2x - 3y = 10$

9. $8x^2 - 14x - 15 = 0$ by using quadratic formula.

10.   Evaluate: $(11011)_2 \times (10001)_2$