



Class XI HIGHER SECONDARY SCHOOL CERTIFICATE EXAMINATION 2023
Time Allowed: 15 minutes SUBJECT: BUSINESS MATHEMATICS

Q1: SECTION "A" Marks 10

Note: Attempt all questions from this section. Each question carries one mark

- The number -3, -2, -1, 0, 1, 2, 3 are called.
a. Whole numbers. b. Natural numbers c. Integers. d. Even numbers
- $\sqrt{16} + \sqrt{9} =$
a. 25 b. 144 c. 7 d. 5
- $a^2 - b^2 = ?$
a. $(a - b)(a - b)$ b. $(a + b)(a + b)$ c. $(a - b)(a + b)$ d. $(b + a)(b + a)$
- If Selling Price is greater than Cost Price then it has a
a. Loss b. Profit c. Neither profit or loss d. Interest
- The ratio of 2 hours to 45 minutes is
a. 2: 45 b. 8: 3 c. 2: 9 d. 4: 3
- 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
- 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
- The slope of the horizontal line is
a. 0 b. 1 c. 2 d. 3
- Graph of linear equation is also called graph of a;
a. Parabola b. Slope c. Straight line d. Distance
- A second-degree equation is also called
a. Cubic equation b. Quadratic equation c. Linear equation d. Incomplete equation

Class XI HIGHER SECONDARY SCHOOL CERTIFICATE EXAMINATION 2023
Time Allowed: 15 minutes SUBJECT: BUSINESS MATHEMATICS SECTION "B" AND SECTION "C" Total Marks 40

Q2: SECTION "B" SHORT ANSWER QUESTION Marks 20

Note: Attempt any 5 questions from this section.

- 25 labourers can construct 15 rooms in 18 days. in how many days can 10 labourers complete 10 rooms of the same size.
- Zahid borrowed Rs. 6000 from Iqbal for $3\frac{1}{2}$ years at a simple interest rate of 8% per annum. How much Zahid has to pay at the end of the period?
- Find the equation of a straight line passing through the points. (0, 4) and (-3, 0)
- Solve the following equation for x: $3 - [2(1 - x) - x] = 4$.
- Perform the following binary number operations; a) 1111×110 (b) $11110 \div 101$.
- For the following matrices: $A = \begin{vmatrix} 2 & 4 \\ 1 & 3 \\ 5 & 0 \end{vmatrix}$ and $B = \begin{vmatrix} 1 & 3 \\ 0 & 4 \\ 5 & 7 \end{vmatrix}$
Find, (i) $4A$ (ii) $2A + 3B$
- Convert the decimal number 114 into its equivalent binary number and the binary number 10100 to the decimal number.
- The population of a town increases by $2\frac{1}{2}\%$ each year. Three years ago, the population was exactly 44800. What is it now?

SECTION "C" DETAILED ANSWER QUESTIONS

Marks 20

Q3:

Note: Attempt any 2 questions from this section.

- The selling price of an item is Rs. 690 on which 15% profit is earned by the trader. what is the cost price of the item?
- Find the total amount of the present value of an annuity of Rs. 600 after 10 years at 8% compounded semiannually
- Solve the following equations: $2x + 3y = 8$ $5x - 2y = 1$