Business Mathematics

Paper I (Objective Type)

Time Allowed : 15 Minutes

Maximum Marks : 10

L.K.No. 1148

Inter-A-2019

Inter (Part - I)

Commerce Group   Session (2015 - 2017) to (2018 - 20)

Paper Code No. 6641

New Pattern

Note : Four possible choices A , B , C , D to each question are given. Which choice is correct , fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question

Q.No.1 Equality of two ratios is called :

(1)   (A) Proportion (B) Continued Ratio (C) Mixed Number (D) Conditional Equation

(2) What Percentage Rs. 84/- is of Rs. 400/- :

(A) 22 % (B) 21 % (C) 23 % (D) 40 %

(3) The Simple Interest on Rs. 1000/- for 3 years @ 10 % is :

(A) 300 (B) 200 (C) 3000 (D) 100

(4) The time between two successive payments of an annuity is called :

(A) Payment Period (B) Present Value (C) Interval Value (D) Future Value

(5) The term Function is introduced by :

(A) Plato (B) H.G. Wells (C) Gottfried (D) Fisher

(6) If $3x + 2 = 2x + 8$ then the value of " x " is :

(A) 6 (B) 5 (C) 4 (D) 2

(7) The equation $4x^2 - x + 6 = 0$ is example of :

(A) Linear Equation   (B) Quadratic Equation

(C) 3rd Degree Equation (D) Exponential Equation

(8) The system $x - y = 8$ and $x + y = 10$ has solution :

(A) (9,1) (B) (1,9) (C) (10,1) (D) (1,10)

(9) Change of 31 to base 2 is : (A) $(11111)_2$ (B) $(1111)_2$ (C) $(111)_2$ (D) $(10001)_2$

(10) The order of Matrix $\begin{bmatrix} 1 & 2 & 4 \\ 3 & 0 & -3 \end{bmatrix}$ is :

(A) 2 x 3 (B) 3 x 2 (C) 2 x 6 (D) 6 x 2

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Roll No.	1148 - 500	New Pattern
Business Mathematics (Subjective)	Inter-A-2019	Inter (Part - I)
Time = 1: 45 Hrs Total Marks : 40	Commerce Group	Session (2015 - 17) to (2018 - 20)

Note : It is compulsory to attempt (6 - 6) parts each from Q.No.2 and 3 while attempt any (02) questions from Part II. Write same Question No. and its Part No. as given in the question paper.

Part - I

$12 \times 2 = 24$

Q.No.2 (i) Divide Rs. 60,000/- in the Ratio 7 : 5

(ii) Define Inverse Proportion.

(iii) 876 is 30 % of what amount ?

(iv) Find 70 % of 6000 .

(v) Define Invoice Price.

(vi) Mr. Akram purchase an item on a discount of 15 % and paid Rs. 1700/- find the List Price.

(vii) Find the Simple Interest on Rs. 50,000/- if invested for 3 - years @ 10 % per annum.

(viii) Define Ordinary Annuity.

(ix) If $9x + 4 = 4x + 29$ find x .

Q.No.3 (i) Solve $x^2 - 81 = 0$

(ii) Solve $3x^2 = 27$

(iii) Solve $2x + y = 12$, $x - 3y = -1$, find value of x .

(iv) Define Function.

(v) Define Singular Matrix.

(vi) Convert 7 into Binary System.

(vii) If $A = \begin{bmatrix} 1 & 2 \\ 4 & 8 \end{bmatrix}$ Find $|A|$

(viii) Convert $(101)_2$ into Decimal Number System.

(ix) If $f(x) = \dfrac{x}{x + 1}$ then find $f(1)$

Part - II

Q.No.4 (a) 20 men can finish a job in 13 days. How many more men are required to do the same job in 5 days? (4)

(b) Find the Compound Interest due on Rs. 80,000/- invested for 3 years at $7\frac{1}{2}$ % p.a. (4)

Q.No.5 (a) If $H(S) = S^2 - 4$, find $H(3)$, $H(\sqrt{2})$, $H(-2)$ and $H(0)$. (4)

(b) Solve the equation $x^{2/3} - 2x^{1/3} = 8$ (4)

Q.No.6 (a) If $A = \begin{bmatrix} 2 & 3 & 4 \\ 1 & 0 & 2 \\ -4 & 1 & 3 \end{bmatrix}_{3 \times 3}$ Find $A_{11}, A_{22}, A_{33}, A_{12}$ (4)

(b) Evaluate : $(1110)_2 + (1001)_2$ (4)

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