

SECTION - I

2- Attempt any six parts. (6 x 2 = 12)

i	70 is what percentage of 400?	ii	Define ratio.
iii	Define inverse proportion.	iv	Calculate the amount of Zakat on an amount of Rs. 956000.
v	What is the rate of Ushr for the agricultural products of the land which is irrigated by artificial sources?	vi	Define inheritance.
vii	Define profit.	viii	If MP and percentage discount are given, then write the formula of SP.
ix	Define business partnership.		

3- Attempt any six parts. (6 x 2 = 12)

i	Define cheque.	ii	What is meant by crossed cheque?
iii	Find the simple interest on Rs. 20,000 in 3 years at the rate of 7.5%.	iv	What is meant by Tax?
v	The annual value of a house is Rs. 17,00,000. Find the tax payable at a rate of 5%.	vi	Define personal income.
vii	Write 3.51×10^6 in standard form.	viii	Write in the form of single logarithm $5 \log 2x - 7 \log y$
ix	Simplify and write answer in positive exponent. $\frac{x^{-2} \cdot y^4}{x^{-7} \cdot y^5}$		

4- Attempt any six parts. (6 x 2 = 12)

i	Write the general term of arithmetic sequence.	ii	Find b if -3 is the A.M between 9 and b.
iii	Find the union of A and B If $A = \{1,3,5\}$, $B = \{2,4,6\}$	iv	Define Onto function.
v	Define Cartesian plane.	vi	Define conversion graph.
vii	Define median.	viii	Define weighted mean.
ix	Define range and write its formula.		

SECTION - II

Note:- Attempt any three questions.

5- a) A juice manufacturer produces 3000 units in a day employing 15 workers working 8 hours. Find the number of units manufactured when he employs 18 workers working 6 hours. (04)

b) A woman died and left a property of worth Rs. 85,00,000. Calculate the amount of share of her husband if she had two children. (04)

6- a) Divide the profit of Rs. 285,000 among four partners in the ratio, 2:2:5:3. (04)

b) Find the simple profit on Rs. 46000 at 5% for 3 years. (04)

7- a) The annual income of a person including all allowances is Rs. 384,000 and the exempted amount is Rs. 1,90,000. Find the income tax payable by him at the rate of Rs. 0.65%. (04)

b) Simplify $\sqrt[n]{\frac{a^x}{a^y}} \times \sqrt[n]{\frac{a^y}{a^z}} \times \sqrt[n]{\frac{a^z}{a^x}}$, $a \neq 0$ (04)

8- a) Find four A.Ms between -9 and 1. (04)

b) If $U = \{1,2,3, \dots, 25\}$, $A = \{6,9,12,15,18,21\}$ and $B = \{5,9,13,17,21\}$
 verify De Morgan's Law. $(A \cup B)^c = A^c \cap B^c$. (04)

9- a) Draw the figure with the help of following points.
 $A(2, 2)$, $B(-3, 5)$, $C(4, -5)$ (04)

b) Find the standard deviation of the following set of observation
 41, 51, 61, 71, 31, 21, 11 (04)

(The End)