General Mathematics (9th)

Fresh / Reappear

Time: 2 hours 40 minutes.

Section "B"   Marks: 36

Q.2 Attempt any **NINE** parts. All parts carry equal marks.

i. Simplify with the help of logarithm.

$(238.2)(9.506)$

ii. Mr. Hashir bought a plot and paid a tax of Rs. 20,000 at the rate of 2%. Find value of the plot.

iii. Find the value of "x" when $16:x :: x:9$.

iv. Ms. Neelam paid Rs. 4890 as zakat. She had Rs. 50,000 cash and some jewellery. Find the value of her jewellery.

v. Find the loss when cost price is Rs. 900 and loss is 2%.

vi. Convert he following currencies in Pakistani rupees when (1 dollar = Rs. 131 and 1 Euro = Rs. 112)

a. 1395 Euro   b. 375 dollars

vii. Find 12th term of the G.P 4, 8, 16, ...

viii. Find the profit or loss percent when cost price is Rs. 760 and selling price is Rs. 885.

ix. Simplify $\left(\dfrac{x^{2a}}{x^{a+b}}\right)\left(\dfrac{x^{2b}}{x^{b+c}}\right)\left(\dfrac{x^{2c}}{x^{c+a}}\right)$

x. Insert two arithmetic mean between 15 and 27.

xi. Convert the following decimal fractions into percentages.

a. 021   b. 0.007

xii. Draw the graph of the equation $x + 2y = 6$.

Section "C"   Marks: 24

Note: Attempt any **THREE** questions. All questions carry equal marks.

Q.3 If $\cup = \{1, 2, 3, 4,...,20\}$, $A = \{2, 4, 6,...,20\}$, $B = \{1, 3, 5,...,19\}$ and $C = \{\ \}$ then find

i. $A^c \cap B^c$

ii. $B^c \cup C^c$

Q.4 Find the Harmonic Mean (HM) of the following data.

5, 6, 8, 9, 10

Q.5 Find mode for the following data.

C.I	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34
f	1	3	7	12	2

Q.6 If $A = \{1, 2, 3, 4, 5, 8, 9\}$ and $B = \{3, 4, 5, 6, 7\}$ then verify by Venn diagram.

$A \cap B = B \cap A$