

GENERAL MATHEMATICS Paper-IX (26)

۱۔ ہر سوال کے سامنے چار دائرے دیئے گئے ہیں، صرف صحیح جواب والا دائرہ بھر دیں۔

۲۔ (واں کو شیڈ (بھرنے) کے لیے نیلے یا کالے رنگ کا مارکر استعمال کریں۔

۳۔ جواب میں ایک سے زائد دائرے بھرنے سے جواب غلط تصور ہو گا۔

Time: 20 Minutes

SECTION-A

Marks: 15

Q1: Choose the correct option i.e, A,B,C or D?

1. $2.6\% =$ _____.
☐ 26 ☐ 0.26 ☐ 0.026 ☐ 2600
2. In $2:x::x:8$, the value "x" is called _____.
☐ Extreme ☐ Mean proportional
☐ 3rd proportional ☐ 4th proportional
3. Nisab of gold for payment of Zakat is _____.
☐ 7.5gm ☐ 8.7gm ☐ 52gm ☐ 75gm
4. There are _____ types of exchange rate system.
☐ One ☐ Two ☐ Three ☐ Four
5. Property tax= _____.
☐ Rate x value of property ☐ Rate-value of property
☐ Rate+value of property ☐ Value of property
6. $\log_a mn =$ _____.
☐ $\log_a m \cdot n$ ☐ $\log_a m - \log_a n$ ☐ $n \log_a m$ ☐ $m \log_a n$
7. $-(2)^4 =$ _____.
☐ 8 ☐ 8 ☐ 16 ☐ -16
8. The "nth" term of an arithmetic sequence is $a_n =$ _____.
☐ $a + (n-1)d$ ☐ a_n^{n-1} ☐ $2a + (n-1)d$ ☐ $a + (n+1)d$
9. Next term of the G.P 8,4,2 is _____.
☐ $1/2$ ☐ $1/4$ ☐ $1/4$ ☐ 1
10. $A \cup A' =$ _____.
☐ $\{\}$ ☐ $\cup$ ☐ A ☐ A'
11. If set "A" has three elements, then number of elements in $A \times A$ are _____.
☐ 9 ☐ 6 ☐ 2^9 ☐ 2^3
12. The point (2,-2) lays in _____ quadrant.
☐ 1st ☐ 2nd ☐ 3rd ☐ 4th
13. The value that appears more times in a data is _____.
☐ Mode ☐ Median ☐ Mean ☐ Range
14. Range of the data 4,6,10,9,10,12 is _____.
☐ 4 ☐ 6 ☐ 8 ☐ 12
15. Which of the following statement cannot be termed as a set?
☐ Vowels in the English alphabets ☐ First ten natural numbers
☐ Days of the week ☐ Good boys of the school

GENERAL MATHEMATICS 9th (Full Course)

Note: Time allowed for Section-B & Section-C is 2:40 hours.

SECTION-B

Marks: 36

Q2: Attempt any NINE parts. All parts carry equal marks.

- Convert:
(a) 1.4% to decimal fraction. (b) 0.21 to percentage
- Price of petrol was reduced by $3\frac{1}{3}\%$. Its new price is Rs.260 per liter.
Find its original price.
- Find "x" in the proportion 5.8:x::2.9:3.7
- Abid paid Rs. 4830 as Zakat. Find its savings.
- Salma bought a washing machine for Rs. 12000 and sold it for Rs. 13500. Find her profit or loss percent.
- If the worth of the property of a person is Rs. 105000. How much tax he would pay at the rate of 5%?
- Simplify with the help of laws of exponents $\sqrt{\frac{a^x}{a^y}} \cdot \sqrt{\frac{a^z}{a^x}} \cdot \sqrt{\frac{a^x}{a^y}}$
- Find the value of "x" when $\log_x 0.25 = 2$
- If in AP, $a_1 = 43$, $a_{10} = 7$ find a_{25} .
- Verify commutative property of union and intersection for $A = \{a, e, i, o, u\}$ $B = \{a, b, c, \dots, z\}$
- If $X = \{3, 4, 5\}$ and $Y = \{a, b, c\}$ then write:
(a) An onto function from X to Y
(b) A function which is from Y into X
- Define the terms: (a) Median (b) Quartiles

SECTION-C

Marks: 24

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

- Q3: Find the variance and standard deviation for the following data.
5, 8, 12, 14, 16
- Q4: Insert five geometric means between $\frac{3}{4}$ and $\frac{16}{243}$.
- Q5: Simplify with the help of logarithm $(32.54) \times (6.378)$.
- Q6: Ahmad purchased a table for Rs. 16500. He paid Rs. 18000 that also include tax. Calculate tax and the tax rate.

