

MATHEMATICS

SECTION A

Max Marks: 100

Q1. Tick (✓) the correct answer for each of the following: (10 X 2 =20)

- i) In 1 Km = _____ mm
 (a) 1 (b) 100 (c) 1000 (d) 1000000
- ii) The value of $-77+(-84)+318$ is :
 (a) 150 (b) 157 (c) 582 (d) 152
- iii) Sixty three thousandths is equal to :
 (a) 0.63 (b) 0.603 (c) 0.630 (d) 0.063
- iv) Which of the following number is prime :
 (a) 137 (b) 48 (c) 100 (d) 250
- v) Sum of all angles in triangle is :
 (a) 270° (b) 90° (c) 180° (d) 360°
- vi) If a, b, c, d are in proportion, then
 (a) $ab=cd$ (b) $ac=bd$ (c) $ad=bc$ (d) $b^2=ac$
- vii) L.C.M. of 20 and 24 is :
 (a) 60 (b) 120 (c) 20 (d) 24
- viii) $2x-3y+5z^2$ is a
 (a) Monomial (b) Binomial (c) Trinomial (d) Quadrinomial
- ix) The number of bisectors that can be drawn of a given angle is :
 (a) 1 (b) 2 (c) 4 (d) Infinitely many
- x) Distance under a circle is called its :
 (a) Arc (b) area (c) segment (D) circumference

SECTION B

All the questions from Q.No. 2 to Q.No. 9 carry 4 marks each. (8 x 4 = 32)

Q2. A square and a rectangle have equal area. If a side of square is 24 cm and the length of the rectangle is 32 cm. Find the breadth of the rectangle.

Q3. Find the value of $\frac{5}{2} + \frac{1}{4} - \frac{3}{8}$.

Q4. If the product of two numbers is 36 and their HCF is 12, find their L.C.M.

Q5. Replace each * by correct digit.

a)

| | | | |
|-------|---|---|---|
| | 3 | 5 | 6 |
| — | * | 6 | * |
| <hr/> | | | |
| | 1 | * | 9 |
| <hr/> | | | |

b)

| | | | | |
|-------|---|---|---|---|
| | 6 | 5 | 0 | * |
| + | | 6 | * | 1 |
| <hr/> | | | | |
| | 7 | * | 5 | 2 |
| <hr/> | | | | |

Q6. Find the difference between the greatest 4 digit number and the smallest 5 digit number.

Q7. Write the following fractions into decimal number.

a) $7\frac{3}{40}$

b) $10\frac{1}{2}$

Q8. Solve the following equations:

a) $4x = -2 + 6x$

b) $4y = 12$

- Q9. Five pens cost Rs. 115. How many pens can you buy in Rs. 207?

SECTION C

All the questions from Q.No. 10 to Q.No. 17 carry 6 marks each. (8 x 6 = 48)

- Q10. Find the cost of fencing a rectangular park of length 175m and breadth 125m at the rate of Rs. 12 per metre.

- Q11. Find the greatest 4-digit number which is exactly divisible by 135.

Q12. Solve : $7\frac{1}{6} + 2\frac{2}{3} - 4\frac{2}{9}$

Q13. Arrange the following fractions in descending order: $\frac{3}{4}, \frac{3}{8}, \frac{1}{2}, \frac{5}{6}$

Q14. Write the following statement in the form of equations: (6)

a) Six more than twice a number x is _____

b) Seven reduced from four times x is _____

c) Twelve is five more than a number x is _____