

CADET COLLEGE PETARO

Model Test Paper

CLASS-VIII

MATHEMATICS

Time: 1 Hour

Max Marks: 100

Passing Marks: 50

SECTION-I MARKS- 68

QNo.1: Write TRUE or FALSE for each of the following statements. Each part carries 2 marks.

- (i) The mid point of the group (50- 54) is 52. (_____)
- (ii) Surface area of the cylinder $I = 2\pi r(r + h)$. (_____)
- (iii) The sum of the measures of the three angles of a triangle is 360° . (_____)
- (iv) $x^0 + 1 = 2$ (_____)
- (v) $-5ab + c \div 3 + c$ has four terms. (_____)
- (vi) Circumference of a circle is $= 2\pi d$ (_____)
- (vii) A quadrilateral with a pair of opposite sides parallel is called trapezium. (_____)
- (viii) The union of two sets A and B, is a set which contains all elements of A and B (_____)
- (ix) The solution of $\frac{x}{2} - 5 = 12$ is 22. (_____)
- (x) If the measure of one angle of a right triangle is 30° then the measure of other angle is (_____)

QNo.2: FILL IN THE BLANKS. Each part carries 2 marks.

- (i) If $2 : a = 15 : 30$, then $a =$ _____.
- (ii) The length of the diameter of a circle is 7cm then circumference of the circle is ____.
- (iii) $\{4,6,8,9,10\}$ is the set of first five _____ numbers.
- (iv) The first and last elements of a proportion are called the _____.
- (v) If $a + b = b + a$, then this property is called _____.
- (vi) The equality of two ratios is called a _____.
- (vii) Product of $3a$ and $a^2 + b^2 =$ _____.
- (viii) Open sentences which involve the symbols " $<$ " or " $>$ " are called _____.
- (ix) If one side of a circle is $2x$ cm then its perimeter = _____.
- (x) 6 is added to a number the sum is 9. What is the number? _____.

QNo.3: Select the correct answer . Each part carries 2 marks.

- (i) If $A : B = 5 : 6$ and $B : C = 2 : 7$, then $A : C = 10 : 7$.
(a) 5:7 (b) 7:10 (c) 10:7 (d) none
- (ii) $A = \{ \}$, $B = \{1,2,3\}$ then $A \cup B =$ _____ $\{ \}$
(a) $\{ \}$ (b) $\{1,2,3\}$ (c) $\{2,3\}$ (d) $\{1,3\}$
- (iii) The diameter of a circle = 2 _____
(a) Circumference (b) Radius (c) Sector (d) none
- (iv) $3x - 5 = x + 7$ then $x =$
(a) 12 (b) 4 (c) 6 (d) none
- (v) $x^2 - 2x + 1$ is a ----- degree polynomial
(a) first (b) second (c) third (d) none
- (vi) In a right angle triangle, the sum of two -----angles will be 90^0 degrees.
(a) obtuse (b) acute (c) supplement (d) none
- (vii) Sum of first two composite numbers which are also odd, is _____
(a) 5 (b) 8 (c) 14 (d) 24
- (viii) The sum of $3a$ and $a^2 + b^2$ is _____
(a) $3a + b^2$ (b) $3a^3b^2$ (c) $3a^3 + 3b^2$ (d) none
- (ix) $|-4| + \sqrt{25} =$ _____
(a) 1 (b) 4 (c) 9 (d) none
- (x) Information handling is a part of _____
(a) Mathematics (b) Statistics (c) Civics (d) Physics
- (xi) A floor has an area of 100 square meters. What is the perimeter of floor?
(a) 10cm (b) 20cm (c) 40cm (d) none
- (xii) $(15a^2 - 10ab) \div 5a =$ _____
(a) $3a - 2b$ (b) $2a - 3b$ (c) $3a + 2b$ (d) $25a^3b$
- (xiii) The algebraic expression $3x^2y - 4xy + xy^2$ has _____ terms.
(a) Two (b) Three (c) Four (d) Eight
- (xiv) Set of first three prime number is____
(a) $\{1,2,3\}$ (b) $\{12,5\}$ (c) $\{2,3,4\}$ (d) $\{2,3,5\}$

SECTION-II MARKS-32

Note: Attempt any FOUR questions from this section. Each question carries 8 marks.

QNo.4 The diameter of a cylindrical tank is 14m long and its volume is 1540m. Find its height.?

QNo.5 Solve the equation : $3x + \frac{3}{8} = 2x + \frac{2x}{3}$

QNo.6 Find the quotient of : $(4a^2 - 12ab + 9b^2) \div (2a - 3b)$

QNo.7 A lamp bought for Rs.1800, was sold at a loss of 5%. Find its selling price.

QNo.8 Draw a parallelogram KLMN, where $m \overline{KL} = 5\text{cm}$, $m \overline{LM} = 6.5\text{ cm}$ and $m \angle K = 70^\circ$

(Don't write steps of construction)

QNo.9 Amjad and Babar earned Rs.40000/- During the year in a business. If their investment was in the ratio 3:5, find each one's share in the profit.

(THE END)