

CADET COLLEGE PETARO

Model Test Paper

CLASS-VII

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. $y = 3$ is a solution of $3y - 2 = 10$ (_____)
- ii. English alphabets a , b ,c, are used to denote sets. (_____)
- iii. $-a \times 2(-b)^2 = -3ab^2$ (_____)
- iv. The sum of all angles on a point is 180° (_____)
- v. A set having only one element is called singleton. (_____)
- vi. The distance between the Centre and any point on the circle is called diameter. (_____)
- vii. $B = \{2,4,6,8\}$, symbolically $5 \in B$ (_____)
- viii. 60% discount on Rs.6000 is 360 rupees. (_____)
- ix. $\frac{3}{2}, \frac{4}{3}, \frac{5}{4}$ etc. are improper fractions. (_____)
- x. $A = \{5,6,6,7,8\}$ is not a set (_____)

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

- (i) 0,1,2,3,4,... are called _____ numbers.
- (ii) _____ is called multiplicative identity.
- (iii) -7 _____ -10 (Fill in the blank with $<$ or $>$)
- (iv) A line segment joining any two points of a circle is called _____
- (v) If $A = \{a,b,c\}$ then a,b,c are _____ of a set A.
- (vi) If $\frac{a}{3} = \frac{4}{12}$, then $a =$ _____.
- (vii) Portion of circle between two radial segments is called _____
- (viii) A circular diagram in which values are represented by sectors is called _____
- (ix) The degree of $x^3y + xy^2$ is _____
- (x) The simple form of the ratio $1\frac{3}{5} : \frac{7}{2}$ is _____

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

- (i) $\frac{3}{100}$ is read as -----percent
(a) One (b) Hundred (c) Two (d) Three
- (ii) In $-y^3$, the co-efficient of y -----
(a) 3 (b) -3 (c) 1 (d) -1
- (iii) Zero is additive identity in set of natural numbers.
(a) True (b) False (c) Both a and b (d) none
- (iv) Product of x^7 and x^2 is -----
(a) x^9 (b) x^{14} (c) $2x^5$ (d) $2x^8$
- (v) The sum of x and 6 is 14 then $x =$ _____
(a) 20 (b) 8 (c) 24 (d) -8
- (vi) The solution of $7y - 2 = 47$ is
(a) 7 (b) 9 (c) 5 (d) 45
- (vii) The smallest natural number is _____
(a) 0 (b) 1 (c) 2 (d) 100
- (viii) $13 - 8 = 5$ is _____ sentence.
(a) Open (b) True (c) false (d) none
- (ix) The L.C.M of 12, 8, 24 is _____
(a) 4 (b) 6 (c) 72 (d) 48
- (x) The ratio between 25cm and 1m is _____
(a) 25:1 (b) 1:25 (c) 1:4 (d) none
- (xi) The first odd composite number is
(a) 3 (b) 5 (c) 7 (d) 9
- (xii) Prime numbers from 6, 8, 9, 10, 11, 17, are _____
(a) 9, 11 and 17 (b) 11 and 17 (c) 6, 8 and 10 (d) none
- (xiii) The degree of $-4x$ is -----
(a) 0 (b) 4 (c) -4 (d) 1
- (xiv) The H.C.F of 24 and 40 is _____
(a) 4 (b) 6 (c) 8 (d) none

SECTION-II-MARKS-32

Note: Attempt any FOUR questions from this section. Each question carries 08 marks.

- QNo.4** There were 8500 voters in a village, 34% did not cast their votes. Find the numbers of voters who cast their votes.
- QNo.5** Find the fourth proportional of 2, 5, 8.
- Q.No.6** Solve: $5(2x - 1) = 10(3x + 2)$
- QNo.7** A man bag purchased 10 dozen eggs at the rate of Rs.120 per dozen 3 dozen eggs are broken . Rest of the eggs are sold at the rate of Rs. 130 per dozen.
Find the loss or profit percent.
- QNo.8** Subtract $2ab - 5b^2 - 2a^2$ from $4a^2 - 6b^2 + 2ab$
- QNo.9** Draw an angle of 90° and bisect it. Use the compass and ruler only.
(Don't write steps of construction)

THE END