

# CADET COLLEGE PETARO

## SYLLABUS OUTLINE MATHEMATICS - VII

1. Sets.
2. Whole Numbers.
3. Factors and Multiples
4. Integers
5. Simplifications
6. Ratio and Proportion
7. Financial Arithmetic
8. Introduction to Algebraic
9. Linear Equations
10. Geometry
11. Perimeter and Area
12. Three Dimensional Solids
13. Information Handling

# CADET COLLEGE PETARO

## CLASS-VII MODEL TEST PAPER MATHEMATICS

Time: 1 Hour

Max. Marks: 100

### SECTION-A (OBJECTIVE) [20 MARKS]

Q.1.a Choose the correct answer for each from the given options.

- i. Line segment AB is denoted by:  
(A)  $\overleftrightarrow{AB}$  (B)  $\overleftarrow{AB}$  (C)  $\overline{AB}$  (D)  $\overrightarrow{BA}$
- ii. Bisector divided a line segment into \_\_\_\_\_ equal parts.  
(A) Two (B) Three (C) four (D) five
- iii. An algebraic sentence involving the sign of equality "=" is called  
(A) Equation (B) Expression (C) Algebraic Sentence (D) Identity
- iv. The word "percent" means out of \_\_\_\_\_.  
(A) Terms (B) Hundred (C) Total value (D) None
- v. To find the ratio between two quantities it is necessary that they must be of the \_\_\_\_\_ kind.  
(A) Same (B) Different (C) Equal (D) Both (A) and (C)
- vi. In BODMAS, M stands for \_\_\_\_\_.  
(A) Product (B) Multiplication (C) Both (a) and (b) (D) All of these
- vii. Sum of two negative integers is always \_\_\_\_\_ integer.  
(A) Positive (B) Negative (C) Both (A) and (B) (D) none
- viii. Product of two non-zero numbers =  
(A) LCM (B) HCF (C)  $HCF \times LCM$  (D) None
- ix. The Predecessor of 1 in the set of whole numbers is \_\_\_\_\_.  
(A) 3 (B) 1 (C) 2 (D) 0
- x. The smallest natural number is \_\_\_\_\_.  
(A) 0 (B) 1 (C) 100 (D) 3

**Q.1.b Fill in the blanks**

- 1 Surface area of cuboid = \_\_\_\_\_
- 2 Area of trapezium is \_\_\_\_\_
- 3  $S.P - C.P =$  \_\_\_\_\_
- 4  $Profit \% =$  \_\_\_\_\_
- 5 Cube has \_\_\_\_\_ edges
- 6 The bracket { } is called \_\_\_\_\_
- 7 Division by \_\_\_\_\_ is not possible.
- 8 Cube has \_\_\_\_\_ vertices.
- 9 Product of a variable  $x$  with itself is \_\_\_\_\_
- 10 Product of means = Product of \_\_\_\_\_

**SECTION-A (OBJECTIVE)**  
**[80 MARKS]**

**NOTE: ATTEMPT ALL QUESTIONS. EACH QUESTION CARRIES 10 MARKS.**

**Q.1 (a)** Define set with example.

**(b)** Give reason why following collections are not set.

**(i)** { $d, o, o, r$ }

**(ii)** { $a, f, d, a$ }

**(iii)** Set of beautiful birds

**(iv)** Set of good players

**Q. 2** Arif deposited Rs 45800 in his bank account. After a month he withdrew Rs 3500 from it. How much money was left in his account?

OR Find the greatest 5 digit number which is exactly divisible by 75.

**Q.3** Simplify: **(i)**  $3\frac{1}{2} + \left\{ \left( 10\frac{2}{5} - 5\frac{1}{3} \right) \div 3\frac{2}{3} \right\} - 1\frac{1}{5}$  . **(ii)**  $[x + x + (y + y + 2x)]$  .

**Q.4** Find the mean proportion in the following.

**(i)** 15 and 60

**(ii)** 44 and 99

**OR**

Rehana can write 26 words in 2 minutes. How much time she will take to write 325 words?

- Q.5 (a) The 18% of the distance between two cities is 36 km. Find the distance between two cities.  
(b) Imran obtained 549 marks out of 800 and his sister obtained 459 out of 600. Whose performance is better?

- Q.6 (a) Add:  $12xy + 3x + 4y$ ,  $5x + 6y + 8xy$   
(b) Subtract:  $x + 3y + 5z$  from  $2x - 15y - 9z$ .

Q.7 Solve any two of the following equations.

(i)  $1024y - 512 = 2048$

(ii)  $\frac{u+1}{2} = 5$

(iii)  $\frac{3x+4}{8} = \frac{5x+6}{4}$

OR

The price of a toy was decreased by Rs.7. If new price is Rs.25. find the original price.

- Q.8 (a) Construct a triangle XYZ in which  $m\angle Z = 90^\circ$ ,  $m\overline{XY} = 7\text{ cm}$ ,  $m\overline{XZ} = 5\text{ cm}$   
(b) Draw a line segment measuring 7.6 cm and draw its right bisector. Then bisect its each part into equal parts.