



# ANGEL'S PUBLIC SCHOOL

## SAMPLE PAPER

PERIODIC TEST – I SESSION 2025 – 26

CLASS – IX

TIME : 1 hr. : 30 min.

SUBJECT – MATHEMATICS

M.M = 40

### General Instructions:

- (a) Section A comprises 5 questions of 1 mark each.
- (b) Section B comprises 4 questions of 2 marks each.
- (c) Section C comprises 4 questions of 3 marks each.
- (d) Section D comprises 2 questions of 5 marks each.
- (e) Section E comprises 1 case based questions of 5 marks.

### SECTION – A

1. A number is an irrational if and only if it's decimal representation is \_\_\_\_.  
(a) non terminating (b) non terminating non repeating  
(c) non terminating repeating (d) terminating
2.  $\sqrt{32} \div \sqrt{2}$  is equal to \_\_\_\_.  
(a)  $\sqrt{30}$  (b) 4 (c)  $\frac{1}{4}$  (d) 16
3. The Degree of the zero polynomial is \_\_\_\_.  
(a) 0 (b) 1 (c) any natural number (d) not defined
4. The coefficient of  $x^2$  in the polynomial  $(2-3x^2)(x^2-5)$  is \_\_\_\_.  
(a) -17 (b) -10 (c) -3 (d) 17
5. The value of abscissa in  $(6,-6)$  is \_\_\_\_.  
(a) -6 (b) 6 (c)  $\frac{1}{6}$  (d)  $\frac{6}{7}$

### SECTION – B

6. Define rational and irrational numbers with one example of each.
7. Factorise:  $3x^2 - x - 4$
8. Evaluate by using an appropriate identity:  $(99)^2$ .
9. Find an irrational number between  $\frac{1}{7}$  and  $\frac{2}{7}$ .

### SECTION – C

10. Locate  $\sqrt{3}$  on the number line.
11. Write the quadrant in which the following points lie:  
 $(3,-5)$ ,  $(6,2)$ ,  $(2,-2)$ ,  $(4,-3)$
12. Factorise:  $9x^2 + 6xy + y^2$
13. Write four solutions of the equation  $3x + 2y = 10$ .

### SECTION – D

14. Verify that  $x^3 - y^3 = (x - y)(x^2 + xy + y^2)$ . Also factorise  $64m^3 - 125n^3$
15. Find the values of a and b in the following:

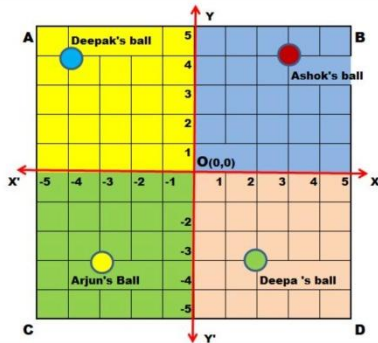
$$\frac{3 - \sqrt{5}}{3 + 2\sqrt{5}} = a\sqrt{5} - \frac{19}{11}b$$

OR

Represent  $\sqrt{9.3}$  on the number line.

### SECTION – E

16. There is a square park ABCD in the middle of a Saket colony in Delhi. Four children Deepak, Deepa, Ashok and Arjun went to play with their balls. All the four children roll their ball from centre point O in the direction of XOY, X'OY, X'OY' and XOY'. Their balls stopped as shown in the above image.



- (i) What are the coordinates of the balls of Ashok?
- (a) (4,3) (b) (3,4) (c) (4,4) (d) (3,3)
- (ii) What are the coordinates of the balls of Deepa?
- (a) (2,-3) (b) (3,2) (c) (2,3) (d) (2,2)
- (iii) What is the line XOY' called?
- (a) y axis (b) x axis (c) ordinate (d) origin
- (iv) What is the point O (0,0) called?
- (a) y axis (b) x axis (c) ordinate (d) origin