PM SHRI KENDRIYA VIDYALAYA SITAPUR FIRST SHIFT
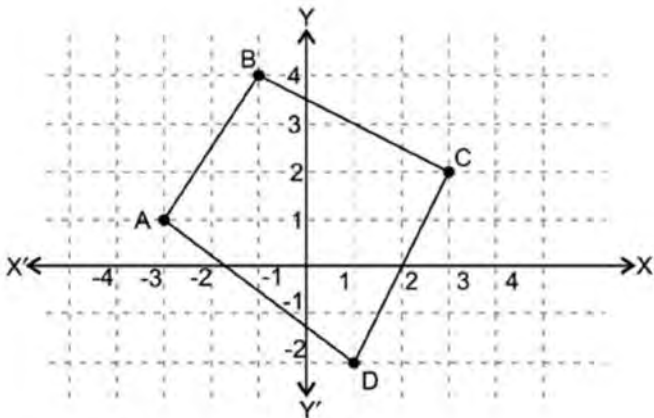
PERIODIC TEST-3
CLASS-IX (MATHS) 2023-24
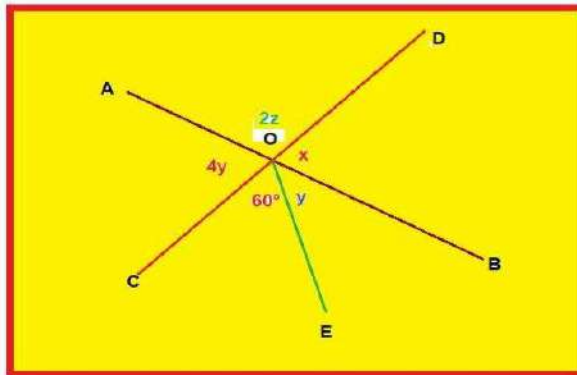
M.M:-40   **TIME:-90 MIN**

QUESTIONS	SECTION-A	MARKS
Q.1	Every irrational number is (a) even number (b) odd number (c) natural number (d) real number	1
Q.2	Degree of the polynomial $x^2 +2x + 5$ (a) 1 (b) 2 (c) 3 (d) 4	1
Q.3	(-1, 0) lies in (a) first quadrant (b) 2nd quadrant (c) 3rd quadrant (d) x-axis	1
Q.4	One solution of the linear equation X+2Y=5 is (a) (1,2) (b) (2,1) (c) (-1,2) (d) (-2,1)	1
Q.5	Obtuse angle lies between (a) 0^0 and90^0 (b 90^0 and180^0 (c) 180^0 and270^0 (d) 270^0 and360^0	1
Q.6	Which is congruence criteria for two triangles (a) AAA (b) ASS (c) SSS (d) AA	1
Q.7	Axioms are assumed: (a) universal truths in all branches of mathematics (b) theorems (c) definitions (d) universal truth specific to geometry	1
Q.8	Sum of angles of a Quadrilateral is (a) 90^0 (b) 180^0 (c) 270^0 (d) 360^0	1
Q.9	Chord of a circle is a line segment (a) whose end points on the boundary of circle (b) Touches the circle (c) Passes through Circle (d) none of these	1
Q.10	Area of a triangle is (a) $\sqrt{s(s-a)(s-b)(s-c)}$ (b) $\sqrt{(s-b)(s-c)}$ (c) $\sqrt{s(s-a)}$ (d) $\sqrt{s(s-a)(s-b)}$	1
Q.11	Curved surface of a cone is (a) $2\pi rl$ (b) $3\pi rl$ (c) $\frac{1}{2}\pi rl$ (d) πrl	1
Q.12	Two adjacent angles of a parallelogram are $(2x +25)^0$ and $(3x -25)^0$. The value of x is (a) 28^0 (b) 32^0 (c) 36^0 (d) 42^0	1
	SECTION- B	
Q.13	Tour students A, B, C and D visited a Park on Sunday along with their Mathematics teacher. The teacher instructed all four students to attempt test. They are sitting at the corners of a park, which is in the shape of a quadrilateral and started solving the test paper. 	4

(a) Write the coordinates of A and B.
(b) Write the ordinate of D.
(c) In which quadrant is A sitting ?
 (d) who is sitting in the third quadrant

Q.14	 Answer the Following Questions 9i0 What is the value of x? (ii)What is the value of y? (iii)What is the value of z? (iv)What should be the value of 2x + 3z	4

SECTION-C (VSA)

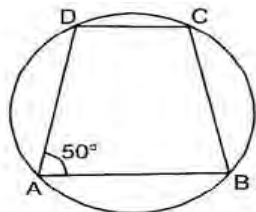| Q.15	Simplify $(a - 2b + c)^2$	1
Q.16	State Mid-point theorem	1
Q.17	Find an irrational number between $\frac{1}{7}$ and $.\frac{2}{7}$	1
Q.18	Express the following linear equation in the form ax + by + c = 0 and indicate the values of a, b and c $x - \frac{1}{2}y - 20 = 0$	1
Q.19	. Find the value of k, if x = 2, y = 1 is a solution of the equation 2x + 3y = k..	1
Q20	In a quadrilateral, ∠A = ∠B = 75° and ∠D = 110°, find ∠C.	1
Q.21	the given figure, ABCD is a cyclic quadrilateral, If ∠A = 50°, then find the measure of ∠DCB. 	1
Q.22	Rationalise the denominator of $\frac{1}{\sqrt{3}-\sqrt{5}}$	1

SECTION-D

Q.23	Write $0.\bar{7}$ in the form $\frac{p}{q}$	2
Q.24	Evaluate $-12^3 + 7^3 + 5^3$	2
Q.25	Find the volume of a Sphere whose radius is 4.2 cm	3
Q.26	Factorise : $2y^3 + y^2 - 2y - 1$	2
Q.27	Represent by a Bar graph	3

Pets	Cow	Dog	Parrot	Rabbit
Number of families	18	24	10	5