PERIODIC TEST – 1
MATHEMATICS – IX, SESSION: 2019 – 20

Max. Marks: 40   **Time: 1 Hr and a Half**

Note: There are four sections in this Question paper. Section A, B, C and D. Section A contains 10 Questions of 1 mark each, Section B contains 3 Questions of 2 marks each, Section C contains 4 Questions of 3 marks each and Section D contains 3 Questions of 4 marks each.

SEC –A

1. Find the value of k in $p(x)=x^2 - x +k$ if $x + 1$ is a factor of $p(x)$.
2. Find the degree of each polynomial.
   (i) $5x^2+3x-2$ (ii) $3x+7$
3. Find the value of k, if $x = 2$, $y = -1$ is a solution of the equation $2x + 3y = k$..
4. Choose the correct option
   A point has
   (a) No magnitude   (b) magnitude   (c) length   (d) height
5. Check whether $(4, 0)$ is solution of $x-2y=4$ or not.
6. Write Euclid's fifth postulate.
7. Name the horizontal and vertical lines drawn in Cartesian plane.
8. $(3+ \sqrt{3}) (3 - \sqrt{3})$ is rational number or irrational number.
9. Simplify $\dfrac{11^{\frac{1}{2}}}{11^{\frac{1}{4}}}$
10. In which quadrants or axis the following points occurs
    (i) $(-4 , -2)$ (ii) $(0, -5)$

SEC –B

11. Express $0.\overline{39}$ in the form of $\frac{p}{q}$.
12. Evaluate $(28)^3+(-15)^3+(-13)^3$ by using suitable identity.
13. In given figure if AC=BD then prove that AB= CD

   A   B   C   D

SEC –C

14. Represent $\sqrt{9.3}$ on number line.
15. In which axis or quadrant the following points occurs.

    A(-5,-6) , B(0,8) , C(-2,0), D(2,-4), E(-5,2), F(3,-2)

16. Draw the graph of $2x +y=3$
17. Factorise $64a^3 – 27 b^3 – 144a^2b +108ab^2$.

SEC –D

18. Factorise $x^3 – 23x^2 + 142x – 120$.
19. Plot the following points on a graph sheet
    A(-5,6) , B(-4,8) , C(-2,0), D(0,-4), E(-5,2), F(3,-2), G(6,2), H(1,-1)

20. The taxi fare in a city is as follows: for the first kilometer, the fare is Rs 8 and for the subsequent distance it is Rs 5 per km. taking the distance covered as x km and the total fare as Rs y, write a linear equation for this information, and draw its graph.

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BLUE PRINT

Name of the Chapter	V.S.A. 1 Mark	S.A. I 2 Mark	S.A. II 3 Mark	L.A. 4 Mark	Total 40
Number System	2(2)	1(2)	1(3)	….	4(7)
Polynomials	2(2)	1(2)	1(3)	1(4)	5(11)
Coordinate Geometry	2(2)	….	1(3)	1(4)	4(9)
Linear Equation in two variables	2(2)	….	1(3)	1(4)	4(9)
Introduction to Euclid's Geometry	2(2)	1(2)	….	….	3(4)
Total	10(10)	3(6)	4(12)	3(12)	20(40)