



INDIAN SCHOOL SOHAR
PERIODIC ASSESSMENT – 1(2022 – 23)
MATHEMATICS

Class: IX

MAX. MARKS: 20

Date: 24-05-2022

DURATION: 45 MINS

General Instructions:

- a. All questions are compulsory.*
b. Section A comprises 1 question of 1 mark, Section B comprises 3 questions of 2 marks each and Section C comprises 3 questions of 3 marks each.

SECTION A

1. If $y^2 = 225$ then y is
 (a) a rational number (b) an irrational number (c) neither rational nor irrational (d) none of these
2. If $x = 2 + \sqrt{3}$ then value of $\frac{1}{x}$ is
 (a) $2 + \sqrt{3}$ (b) $2 - \sqrt{3}$ (c) $\sqrt{3} - 2$ (d) 1
3. $\sqrt{6} \times \sqrt{8}$ is equal to
 (a) $6\sqrt{8}$ (b) $3\sqrt{4}$ (c) $4\sqrt{3}$ (d) 48
4. The y – coordinate of a point is the distance of that point from
 (a) Y – axis (b) origin (c) X – axis (d) none of these
5. The perpendicular distance of the point $(-4, -3)$ from X – axis is
 (a) -4 (b) 3 (c) 4 (d) -3

SECTION B

6. Express $3.42\bar{5}$ in the form $\frac{p}{q}$, where p and q are integers, $q \neq 0$
7. If the coordinates of the points P and Q are $P(-2, 3)$ and $Q(-3, 5)$, then find the value of
 (abscissa of P) – (abscissa of Q)
8. If $2^{5x} \div 2^x = \sqrt[5]{32}$, then find the value of “ x ”

OREvaluate: $(a^{x-y})(a^{y-z})(a^{z-x})$ **SECTION C**

9. Simplify: $12\sqrt{18} - 6\sqrt{20} - 3\sqrt{50} + 8\sqrt{45}$.
10. In which quadrant/axis the following points lie
 (a) $(-4, 5)$ (b) $(5, -4)$ (c) $(0, -5)$

11. If $a + b\sqrt{3} = \frac{\sqrt{3}-1}{\sqrt{3}+1}$ find the values of "a" and "b".

OR

If $x = 3 + 2\sqrt{2}$, find the value of $(\sqrt{x} - \frac{1}{\sqrt{x}})$

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