

• Very short answer type Questions.

$$1 \times 5 = 5$$

- (1) Evaluate $(81)^{3/4}$.
- (2) Find the value of x from $\sqrt[3]{3x-2} = 4$
- (3) The zeros of the polynomial $P(x) = x^2 - 3x$ are?
- (4) If $P(x) = x^3 - 3x^2 + 2x$, Find $P(-3)$.
- (5) Find the zero of the polynomial $Q(x) = 2x + 5$.

• Short answer type question

$$2 \times 5 = 10$$

- (1) Verify that 2 and -3 are zeros of the polynomial $P(x) = x^2 + x - 6$
- (2) check whether $(7+3x)$ is a factor of $(3x^3 + 7x)$.
- (3) Find the value of k for which $(x-1)$ is a factor of $(2x^3 + 9x^2 + x + k)$.
- (4) Represent $\sqrt{3}$ on the number line.
- (5) Simplify
$$\left(\frac{x^p}{x^q}\right)^{p+q} \cdot \left(\frac{x^q}{x^r}\right)^{q+r} \cdot \left(\frac{x^r}{x^p}\right)^{r+p}$$