

MULTIPLE CHOICE QUESTIONS (MCQ)

Q1. The ratio of the length of a rod and its shadow is $1:\sqrt{3}$. The angle of elevation of the sun is

- (a) 30° (b) 45° (c) 60° (d) 90°

Q2. If the angle of elevation of a tower from a distance of 100meters from its foot is 60° , then the height of the tower is

- (a) $100\sqrt{3}$ (b) $\frac{100}{\sqrt{3}}$ (c) $50\sqrt{3}$ (d) $\frac{200}{\sqrt{3}}$

Q3. If the altitude of the sun is at 60° , then the height of the vertical tower that will cast a shadow of length 30m is

- (a) $30\sqrt{3}$ m (b) 15m (c) $\frac{30}{\sqrt{3}}$ m (d) $15\sqrt{2}$ m

Q4. If the angles of elevation of a tower from two points distant a and b ($a>b$) from its foot and in the same straight line from its are 30° and 60° , then the height of the tower is

- (a) $\sqrt{a+b}$ (b) \sqrt{ab} (c) $\sqrt{a-b}$ (d) $\sqrt{\frac{a}{b}}$

Q5. If the angles of elevation of the top of a tower from two points distant a and b from the base and in the same straight line with its are complementary, then the height of the tower is

- (a) Ab (b) \sqrt{ab} (c) $\frac{a}{b}$ (d) $\sqrt{\frac{a}{b}}$

Q6. The tops of two poles of height 20m and 14m are connected by a wire. If the wire makes an angle of 30° with horizontal, then the length of the wire is

- (a) 12m (b) 10m (c) 8m (d) 6m

