1. The decimal representation of $\frac{11}{2^3 \times 5}$ will

(a.) Terminate after 1 decimal place (b.) Terminate after 2 decimal place

(c.) Terminate after 3 decimal place (d.) not terminate

2. The length of longest pole that can be kept in a room (12m × 9m × 8m) is

(a.) 17m (b.) 19m (c.) 21m (d.) 29m

3. The LCM of smallest two digit composite number and smallest composite number is

(a.) 12 (b.) 4 (c.) 20 (d.) 44

4. For which value(s) of k, will the lines represented by the following pair of linear equations be parallel $3x - y - 5 = 0$, $6x - 2y - k = 0$

(a.) All real values except 10 (b.) 10 (c.) $\frac{5}{2}$ (d.) $\frac{1}{2}$

5. If triangle ABC is right angled at C, then the value of sec (A+B) is

(a.) 0 (b.) 1 (c.) $\frac{2}{\sqrt{3}}$ (d.) not defined

6. If $\sin\theta + \cos\theta = \sqrt{2}\cos\theta$, $(\theta \neq 90^0)$ then the value of $\tan\theta$ is

(a.) $\sqrt{2} - 1$ (b.) $\sqrt{2} + 1$ (c.) $\sqrt{2}$ (d.) $-\sqrt{2}$

7. Given that $\sin\alpha = \frac{\sqrt{3}}{2}$ and $\cos\beta = 0$, then the value of $\beta - \alpha$ is

(a) 0° (b) 90° (c) 60° (d) 30°

8. The point which divides the line segment joining the points $(8,-9)$ and $(2,3)$ in ratio 1 : 2 internally lies in the

(a.) I quadrant (b.) II quadrant (c.) III quadrant (d.) IV quadrant

9. The distance of the point P $(-3, -4)$ from the x-axis (in units) is

(a) 3 (b) -3 (c) 4 (d) 5

10. If $A\left(\frac{m}{3}, 5\right)$ is the mid-point of the line segment joining the points $Q(-6, 7)$ and $R(-2, 3)$, then the value of k is

(a.) -12 (b.) - 4 (c.) 12 (d.) - 6