



Test 1

Time: 90 min.

Student Name:

Student no.:

Section:

Circle The Correct Answer

Q.1 A man has a mass of 80 kg. Convert this mass to grams.

- (A) 12×10^5 g (B) 1.2×10^{-5} g (C) 1.2×10^5 g (D) 8×10^4 g (E) 80 g

Q.2 The basic SI unit of force is:

- (A) Lb. (B) kg (C) joule (D) kg.m/s (E) kg m/s²

Q.3 A car is traveling at 90 km/h. The speed of this car in SI unit is:

- (A) 20 cm/s (B) 10 m/s (C) 40 m/s (D) 25 m/s (E) 5 m/s

Q.4 A cube of edge 100 mm, its volume in SI unit is:

- (A) 100 m³ (B) 1.0 m³ (C) 10⁻⁶ m³ (D) 1.0×10^{-3} m³ (E) 7 m³

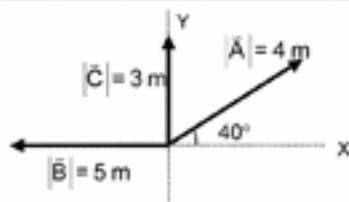
Q.5 The unit of velocity in SI unit is:

- (A) km/s (B) m/s (C) m/s² (D) mi/hr (E) ft/s²

Q.6 The density of Copper is 8.96 g/cm³. This value in kilograms per cubic meter is:

- (A) 8.96 kg/m³ (B) 89.6 kg/m³ (C) 9.25 kg/m³ (D) 8960 kg/m³ (E) 9 kg/m³

Fig. (1)



Q.7 In figure (1), the vector $\vec{A}$ in unit vector notation is:

- (A) $4\hat{i} + 2\hat{j}$ (B) $3.1\hat{i} + 2.6\hat{j}$ (C) $4\hat{j}$ (D) $3.5\hat{i}$ (E) $4\hat{i}$

Q.8 In figure (1), the vector $\vec{C}$ in unit vector notation is:

- (A) $3\hat{j}$ (B) $6\hat{i} - 2\hat{j}$ (C) $9.5\hat{i}$ (D) $3.5\hat{i} + 2\hat{j}$ (E) $6\hat{j}$

Q.9 In figure (1), the angle that $\vec{A}$ makes with the positive Y-axis is:

- (A) 120° (B) 150° (C) 60° (D) 90° (E) 50°

Q.10 In figure (1), the magnitude of vector $\vec{B}$ is:

- (A) -6 m (B) 12 m (C) 5 m (D) 4 cm (E) 2 m

Q.11 Given $\vec{a} = 4\hat{i} - 10\hat{j} + 6\hat{k}$, then the magnitude of vector $\vec{a}$ is:

- (A) 14.14 (B) $14.14\hat{i}$ (C) $14.14\hat{j}$ (D) $14.14\hat{k}$ (E) 12.3