

Yakeen NEET 2.0 2026

Physics By Manish Raj Sir

Motion in a Straight line

DPP: 1

Q1 Assertion (A): Rest (of a body) is a relative term.
Reason (R): Motion of a body may be absolute term.

- (A) Assertion (A) is true, Reason (R) is true;
Reason (R) is a correct explanation for Assertion (A).
(B) Assertion (A) is true, Reason (R) is true;
Reason (R) is not a correct explanation for Assertion (A).
(C) Assertion (A) is true, Reason (R) is false.
(D) Assertion (A) is false, Reason (R) is true.

Q2 The ratio of displacement to distance is

- (A) Always = 1
(B) Always < 1
(C) Always > 1
(D) May be 1

Q3 The numerical ratio of displacement to the distance covered is always:

- (A) Less than one
(B) Equal to one
(C) Equal to or less than one
(D) Equal to or greater than one

Q4 An aeroplane flies 400 m north and 300 m south and then flies 1200 m upwards then net displacement is

- (A) 1204 m
(B) 1300 m
(C) 1400 m
(D) 1500 m

Q5

A person moves on a semicircular track of radius 40 m. If he starts at one end of the track and reaches the other end, find the magnitude of displacement of the person.



- (A) 40 m
(B) 50 m
(C) 80 m
(D) 60 m

Q6 A man goes 10 m towards North, then 20 m towards east then displacement is

- (A) 22.5 m
(B) 25 m
(C) 35.5 m
(D) 30 m

Q7 A hall has the dimensions 10 m × 10 m × 10 m. A fly starting at one corner ends up at a diagonally opposite corner. The magnitude of its displacement is nearly

- (A) $5\sqrt{3}$ m
(B) $10\sqrt{3}$ m
(C) $15\sqrt{3}$ m
(D) $20\sqrt{3}$ m

Q8



A particle moves along a circular path of radius r .

The distance and displacement of the particle after one complete revolution are respectively :

- (A) $0, 2\pi r$
- (B) $2\pi r, 0$
- (C) $0, \pi r$
- (D) $\pi r, 0$

Q9 A body is moving along the circumference of a circle of radius 'R' and completes $\frac{3}{4}th$ of the revolution. then the ratio of its displacement to distance is.

- (A) $2 : \pi$
- (B) $\sqrt{2} : 3\pi$
- (C) $\sqrt{8} : 3\pi$
- (D) $3\sqrt{2} : \pi$

Q10 A boy completes one round of a circular track of radius 20 m in 50 seconds. The displacement at the end of 4 minute 10 second will be

- (A) 40 m
- (B) 20 m
- (C) 80π m
- (D) Zero

Q11 A particle is moving along a circle such that it completes one revolution in 40 seconds. In 2 minutes 20 seconds, the ratio $\frac{|\text{displacement}|}{\text{distance}}$ is

- (A) 0
- (B) $\frac{1}{7}$
- (C) $\frac{2}{7}$
- (D) $\frac{1}{11}$



Answer Key

Q1 (C)

Q2 (D)

Q3 (C)

Q4 (A)

Q5 (C)

Q6 (A)

Q7 (B)

Q8 (B)

Q9 (C)

Q10 (D)

Q11 (D)



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