

Q. — —

Std-11

Unit Test

Marks - 25

Section-A

Q.1

Answer the following questions in one word/
one line. — (5)

- 1) $10 \text{ kg m}^2 \text{ s}^{-2} = \text{ — } \text{ g cm}^2 \text{ s}^{-2}$
- 2) Define 1 AU
- 3) Write dimensional formula of power
- 4) What is uniform motion?
- 5) What is free fall motion?

Q.

Section-B

Q.

Answer the following questions. — (6)

- 1) Explain about gravitational Force.
- 2) Explain about average speed.
- 3) Explain difference between scalar quantities and vector quantities.

Section-C

Q.

Do as directed.

- 1) obtain equations of motion for constant acceleration using method of calculus.
- 2) explain analytical method for addition of two vectors.
- 3) Rain is falling vertically with a speed of 30 m/s . A woman rides a bicycle with a speed of 10 m/s in east to west direction. what is the direction in which she should hold her umbrella.



$$\boxed{} + \boxed{} + \boxed{} + \boxed{} + \boxed{} = \boxed{}$$

Section-D

For a body moving with uniform accelerated motion derive equation of motion by graphical method.