2.MOTION

I. Choose the correct answer.

1. The area under velocity – time graph represents the

   a) velocity of the moving object.

   b) displacement covered by the moving object.

   c) speed of the moving object.

   d) acceleration of the moving object.

2. Which one of the following is most likely not a case of uniform circular motion?

   a) Motion of the Earth around the Sun.

   b) Motion of a toy train on a circular track.

   c) Motion of a racing car on a circular track.

   d) Motion of hours' hand on the dial of the clock.

4. The centrifugal force is

   a) a real force.

   b) the force of reaction of centripetal force.

   c) a virtual force.

   d) directed towards the centre of the circular path.

II. Fill in the blanks.

1. Speed is a _____ quantity whereas velocity is a _____ quantity.
2. The slope of the distance – time graph at any point gives _____
3. Negative acceleration is called _____
4. Area under velocity – time graph shows_____

III. State whether true or false.

1. The motion of a city bus in a heavy traffic road is an example for uniform motion. TRUE / FALSE
2. Acceleration can get negative value also. TRUE / FALSE
3. Distance covered by a particle never becomes zero but displacement becomes zero. TRUE / FALSE
4. The velocity – time graph of a particle falling freely under gravity would be a straight line parallel to the x – axis. TRUE / FALSE
5. If the velocity – time graph of a particle is a straight line inclined to X-axis then its displacement – time graph will be a straight line. TRUE / FALSE