

Class 9
9-5-2016

Formative Assessment I in SCIENCE

Time : 1 hr.
M. Marks : 20

PHYSICS (M. Marks : 07; Time : 20 mts.)

1. a) Under what condition will the magnitude of average velocity of an object be equal to its average speed?
b) What do you mean by instantaneous speed? (½+½)
2. Motion is a relative term. Explain. (1)
3. An athlete completes one round of a circular track of radius 200 m in 40s. What will be the displacement at the end of 2 minutes and 20s? (1)
4. a) Give an example where acceleration is against the direction of motion.
b) A train starting from a railway station and moving with uniform acceleration attains a speed of 40km/h in 10 minutes. Find its acceleration. (½+1½)
5. a) Distinguish between uniform and non uniform motion.
b) Abdul while driving to school computes the average speed of his trip to be 20km/h. On his return trip along the same route, there is less traffic and the average speed is 30km/h. What is the average speed for Abdul's trip forth and back? (1+1)

CHEMISTRY (M. Marks : 07; Time : 20 mts.)

1. a) Name the phenomenon by which particles of two or more substance intermix on their own.
b) Which gas is called dry ice? (1)
2. Define:
a) Latent heat of fusion b) Boiling point (1)
3. a) The Kelvin scale temperature is 270K. What is the corresponding Celsius scale temperature?
b) Boiling point of water is 100°C. Express this in Kelvin scale. (1)
4. a) Write an activity to show that particles of matter have space between them?
b) Why does temperature remains constant during the change of state? (2)
5. Give reason:
a) Solids have fixed shape and fixed volume.
b) Gases are compressive but not liquids.
c) Steam causes severe burns than boiling water.
d) Sponge is a solid, yet we are able to compress it. (2)

BIOLOGY (M. Marks : 06; Time : 20 mts.)

1. What will happen if we put an animal cell into a concentrated salt solution? (1)
2. State any one difference between diffusion and osmosis. (1)
3. What is plasmolysis? (1)
4. Why is plasma membrane called a selectively permeable membrane? (1)
5. How is a prokaryotic cell different from a eukaryotic cell? (any 4) (2)

-X-X-X-X-X-X-