ATOMIC ENERGY EDUCTION SOCIETY
PERODIC TEST II (2017–18)
DATE OF EXAM- 20 Sept 2017

Class- IX **Time: 1 ½ hrs**

Subject- SCIENCE **Marks: 40**

Section – A (Each question carries 1 mark each)

1. Which would require a greater force - accelerating a 2 kg mass at 10 m/ s^2 or 4 kg mass at 8 m/s^2? 1

2. Which of the following can exist in vapour state? 1
a) Oxygen b) Hydrogen c) Carbon dioxide d) Water

3. Proteins are formed in 1
a) Golgi bodies b) Nucleus c) Plastids d) Ribosomes

Section – B (Each question carries 2 marks each)

4. State the law of inertia. What is measure of inertia ? 2

5. An object thrown upward reaches the highest point in 5 sec. Find the velocity with which it was thrown? (Take g = 9.8 m/s^2) 2

6. What produces more severe burns, boiling water or steam? Give reasons. 2

7. Name the factors that affect evaporation. 2

8. What is dry ice? 2

9. How do biotic and abiotic factors affect crop production? 2

Section – C (Each question carries 3 marks each)

10.a) State the law of conservation of momentum. 1

b) A bullet of mass 20 g is horizontally fired with a velocity 150 m/s from a pistol of . mass 2 kg. What is the recoil velocity of the pistol ? 2

11.What is centrifugation? What are its applications? 3

12.Define sublimation. Name two substances that show sublimation. How can you separate Ammonium Chloride and Sodium Chloride from the mixture? 3

13.Name the tissues for the following. 3

a)Stores fat in animal body.

b) Divides and redivides to grow in plants.

c) Tissue that joins bone to bone.

14. Why are lysosomes called suicidal bags? 3

Section – D (Each question carries 5 marks each)

15. a) Derive graphically the expression $s = ut + \frac{1}{2}at^2$,where the symbols have their usual meaning. 3

b) A car having mass 700 kg is moving at a speed of 90 km/h. On applying brakes, its speed reduced to 36 km/h in 10 sec. Calculate the force applied by the brakes. 2

Or

15. a) State second law of motion and derive the expression F = m.a 3

b) Define SI unit of force and write its unit. 2

16. a) Name the nutrients that plant obtain from air and water. 1

b) Name the products obtained from apiculture. 1

c) Name the constituents of phloem. 1

d) Write any 2 differences between Xylem and Phloem 2

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