



**BLOOM PUBLIC SCHOOL**  
**Vasant Kunj, New Delhi**  
**SAMPLE PAPER PERIODIC ASSESSMENT II (2017-2018)**  
**SCIENCE:- IX**

**TIME : 3 Hrs.**

**M.M:- 80**

**General Instructions :-**

- (i) The question paper comprises of two sections, A and B. You are to attempt both sections separately.
- (ii) All questions are compulsory. However, an internal choice is provided in two questions of 3 marks each and one question of five marks.
- (iii) Question numbers 1 to 2 in section A are one mark questions. These are to be answered in one word or in one sentence.
- (iv) Question numbers 3 to 5 are two marks questions. These are to be answered in about 30 words each.
- (v) Question numbers 6 to 15 are three marks questions including a value-based question. These are to be answered in about 50 words each.
- (vi) Question numbers 16 to 21 are five marks questions. These are to be answered in about 70 words each.
- (vii) Question numbers 22 to 27 are explanatory questions based on practical skills and each question carries two marks.

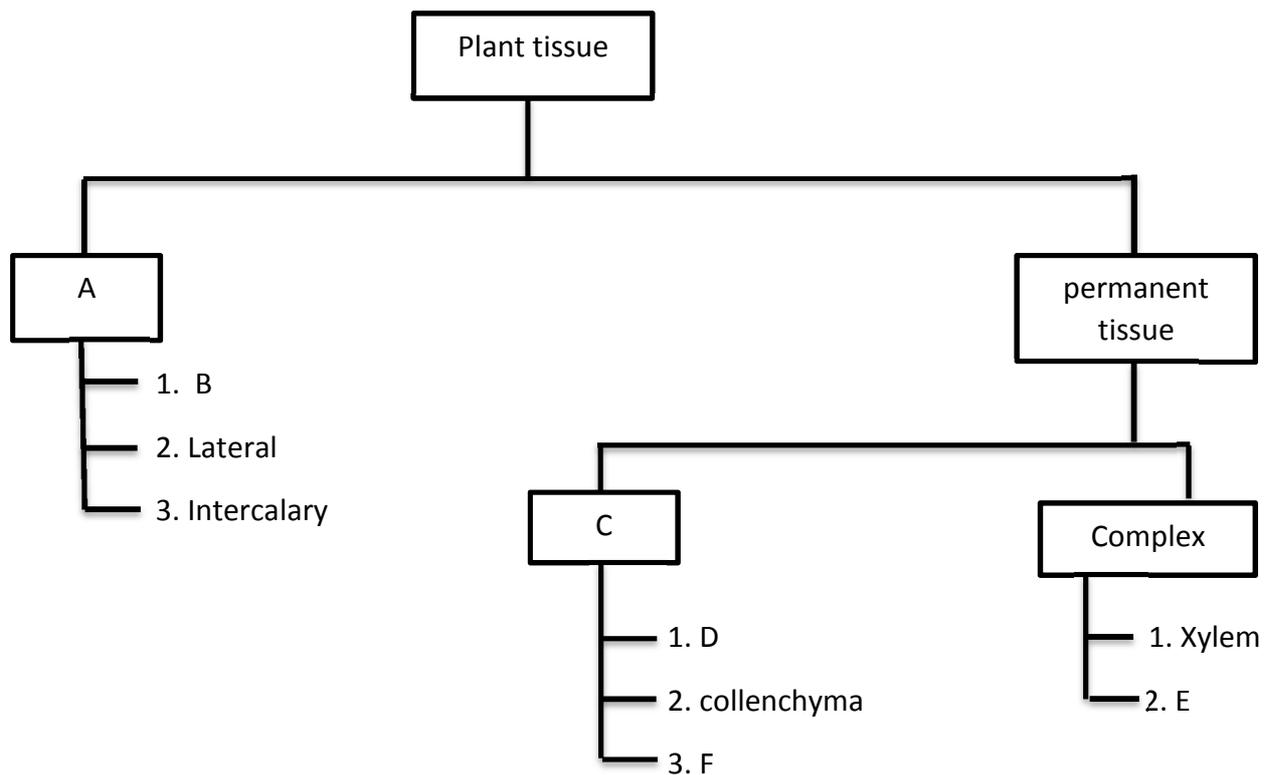
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|-----|---|---|
| Q1. | Why naphthalene balls disappear with time without leaving any residue?  | 1 |
| Q2. | What do you mean by acceleration due to gravity?  | 1 |
| Q3. | Differentiate between prokaryotic and eukaryotic cells  | 2 |
| Q4. | Convert   | 2 |
|     | (a) 300 K to celcius  |   |
|     | (b) 25°C to kevin   |   |
| Q5. | An object of mass 100 kg is accelerated uniformly from a velocity of 5 m s <sup>-1</sup> to 8 ms <sup>-1</sup> in 6 s. Calculate the initial and final momentum of the object. Also, find the magnitude of the force exerted on the object. | 2 |
| Q6. | Explain the interconversion of states of matter with the help of a flow chart. Name the process of each interconversion.  | 3 |

**OR**

You want to wear your shirt to a party, but the problem is that it is wet after a wash. What steps you would take to dry it faster.

- |     |   |   |
|-----|---|---|
| Q7. | Give reason for the following:                  | 3 |
|     | (a) Xylem and phloem are called complex tissues |   |
|     | (b) Cells have different shapes.                |   |
|     | (c) Fertilizers should not be used in excess.   |   |

- Q8. Give the mathematical expression and SI unit for 3
- (a) Acceleration due to gravity
  - (b) Average speed.
  - (c) Recoil velocity of a gun.
- Q9. Comment on the following 3
- (a) Temperature remains constant during the change of state.
  - (b) Liquids have lower density as compared to water.
  - (c) A gas fills the container in which it is kept.
- Q10. Give reasons 3
- (a) We fall forward when brakes are applied in a bus.
  - (b) Seat belts are provided in a car.
  - (c) We are able to walk.
- Q11. Complete the table 3



- Q12. Differentiate between 3
- (a) Elements and compounds
  - (b) Homogenous and Heterogeneous mixture.

- Q13. When I talk about *Bos bubalis* and *Bos indicus*, I am talking about which animal. Why should cross breeding be done between local and exotic breeds? What values are shown by the farmer that conduct interbreeding. **3**
- Q14. Compare the three types of muscles. **3**
- Q15. A stone is thrown vertically upward with an initial velocity of 40 m/s. Taking  $g = 10 \text{ m/s}^2$ , find the maximum height reached by the stone. What is the net displacement and the total distance covered by the stone? **3**

**OR**

State universal law of gravitation. Derive its mathematical expression.

- Q16. Name the technique used to separate **5**
- (a) Butter from curd
  - (b) Camphor from salt
  - (c) Salt from sea water
  - (d) Wheat grains from husk
  - (e) Different pigments from extract of flower petals.
- Q17. Differentiate between distance and displacement. Derive  $2as = v^2 - u^2$  graphically **5**
- Q18. What are weeds? Explain the different methods of weeding. **5**

**OR**

Describe the various methods of preventing weeds

- Q19. How will you separate dyes from black ink using chromatography? Explain it with the help of an example and a diagram. **5**
- Q20. State first law of motion. Give two examples. Derive the recoil velocity of a gun. **5**
- Q21. Draw and label the animal cell and also mark the organelle **5**
- (a) Control center of cell
  - (b) suicidal bags
  - (c) protein factory
  - (d) transport system

### **Practical based questions**

- Q22. A student prepared three solutions - a solution of alum, soil and milk in water. Can you distinguish between the three on the basis of transparency and stability? Explain. **2**
- Q23. In the experiment, to determine the density of a given solid by using a spring balance and a measuring cylinder, a student made the following observations. **2**

Mass of solid = 115g

Initial reading of water level in measuring cylinder = 45ml.

Final reading of water level in measuring cylinder = 69ml

On the basis of these observations, what should be the density of a given solid?

- Q24. Why the brush was used to mount the plant cells.(onion peel) **2**
- Q25. List two important precautions we must take while preparing colloidal solution of starch. **2**
- Q26. In order to measure loss in weight of a solid, a student noted down the apparent weight of the solid in liquid "A" and liquid "B" using a spring balance as 45gwt and 25 gwt, respectively. If the true weight of solid in air is 65gwt **2**
- (i) Which liquid has greater density?
- (ii) Which liquid exerts a greater buoyant force on the solid?
- Q27. Name the stains used for making the slides of plant and animal cells. **2**