CBSE Class 9 Science Sample Paper

<u>Set 2</u>

TIME – 3 HOURS

MAX. MARKS - 80

Instructions:

- A) All questions are compulsory.
- B) Section A is of 1 marks
- C) Section B is of 2 marks
- D) Section C is of 3 marks
- E) Section D is of 5 marks
- F) Section E is of 2 marks

Internal choices are given

Section A

- 1. Describe the arrangement of particles in solids, liquids and gases? [1]
- 2. What do you understand by the term nitrogen cycle? [1]

Section B

3. Are plastids present in animal cells? Name the two common types of plastids. [2]

OR

What kind of mixture is a solution? Name the different

constituents of a solution.	
4. Is it possible to have zero displacements even if a certain distance? Justify your answer. OR	n object covers a [2]
Who framed the law of gravitation? State the law	
5. Give two conditions that are required for a human health.	n to be in good [2]
Section C	
6. State three key postulates of Dalton's atomic theo	ory [3]
OR Name the three different models of an atom and the formulated them.	ne ones who
7. Is blood a connective tissue? Give two important	functions of blood. [3]
8. What happens to the kinetic energy of a falling obground?	oject on hitting the [3]
9. Describe the three characteristics of sound	[3]

10. Name and describe the process to separate a mixture of two miscible liquids. [3] 11. **Define:** [3] a. Valency b. Atomic Number c. Mass Number 12. Draw and label the different parts of a cell. [3] 13. State three ways in which diseases can spread along with an example. [3] OR A bodybuilder lifts a dumbbell of 10 kg and raises it 2 m above the ground. Calculate the work done by him on lifting the weight. 14. State three reasons why the atmosphere is essential for life. [3] 15. Explain what is genetic manipulation in crops? List out its benefits. [3] **Section D** 16. Are plant and animal tissues the same? Name the different types of animal tissues and describe the key function of each tissue. [5]

OR

Give five differences between a plan and an animal cell.

- 17. Name the different divisions of the Kingdom Plantae. Also, describe their major characteristics along with an example for each. [5]
- 18. A boy 60 kg hops with a horizontal velocity of 5 ms^{-1} on a stationary skateboard. The skateboard weighs 4 kg. Find out the velocity when the board starts rolling?

 The condition given here is that any external unbalanced force is absent.

 [5]
- 19. Why is the law of gravitation said to be universal? Given the equation for universal gravitation. Explain clearly the significance of this law. [5]
- 20. What do you mean by greenhouse effect? Name the factors responsible for this effect and also suggest some prevention measures.

[5]

21. Give five differences between an atom and a molecule. [5]

Section E

22. Take a bowl of water containing some amount of oil in it. How will you separate the two. [2]

23.	. Take some items like a bark of a tree or a bone and iden	tify what
	kind of tissues are present in it.	[2]
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24. Water can exist in all the three states solid, liquid and gas. Conduct an experiment and describe what happens to the particles during the change of state? [2]

OR

While observing different kinds of seeds how will you distinguish between a dicot and a monocot seed?

25. In our day to day life, we experience or come across different types of motions.

Can you give an example of the motion when; [2]

- a. The acceleration is positive and in the direction of motion.
- b. The acceleration is uniform or the rate of acceleration is constant.
- 26. When you stretch a rubber band what is the energy generated and lost? [2]
- 27. Can you determine who has a higher pitch, a sparrow chirping or a tiger roaring? Justify your answer. [2]