

INTERNATIONAL INDIAN SCHOOL, DAMMAN
SUMMATIVE ASSESSEMENT ---1, (2015)
SCIENCE
CLASS :IX

SET –A

TIME :3Hrs

MARKS:90

GENERAL INSTRUCTIONS:

1. The question paper comprises of two sections, A and B ,You are to attempt both the sections
2. All questions are compulsory
3. All questions of sections A and all questions of section B are to be attempted separately
4. Question numbers 1 to3 in section A are one mark questions. These are to be answered in one word or in one sentence
5. Question numbers 4 to 6 in section A are two marks questions. These are to be answered in about 30 words each .
6. Question numbers 7 to 18 in section A are three marks questions. These are to be answered in about 50 words each.
7. Question numbers 19 to 24 in section A are five marks questions. These are to be answered in about 70 words each.
8. Question numbers 25 to 33 in section B are multiple choice questions. Each question is a one mark question. Select the most appropriate response out of the four provided to you.
9. Question numbers 34 to36 in section B are questions based on practical skills, which are two marks questions

SECTION A

- | | | |
|----|---|---|
| 1. | Name the tissue present at the growing tips of stem and roots | 1 |
| 2. | How is inertia related to the mass of a body ? | 1 |
| 3. | Give an example of a situation when a body covers some distance but the displacement is zero. | 1 |
| 4. | What produces more severe burns ? Boiling water or steam. Why ? | 2 |
| 5. | Differentiate between Prokaryotic cell and Eukaryotic cell. | 2 |

6. Athletes in pole jump events fall on cushioned surface and not on floor. Give reason. 2
7. (a) Define momentum .State its S I unit. 3
 (b) Two spherical balls A and B of masses 2kg and 4kg are moving along the same line with velocities 2m/s and 4m/s respectively .They collide and after collision the second ball moves with a velocity of 1.5m/s. Find the final velocity of the first ball.
8. (a) What does the slope of v-t graph indicate ? 3
 (b) Draw v-t graphs for ---
 i) A train moving on a straight path along a particular direction with constant velocity.
 ii) A freely falling stone under the action of gravity.
9. (a) State the universal law of gravitation. Give its significance. 3
 (b) How will the gravitational force of attraction between two objects change if their masses are doubled.?
10. Name the following: 3
 1. Tissue that forms the inner lining of our mouth-
 2. The tissue found in the husk of coconut –
 3. The Meristematic tissue found at the nodes of the plants-
 4. The tissue that stores fat in an animal body-
 5. The Connective tissue with a fluid matrix-
 6. The tissue that divides and redivides to grow in plants-
11. (a) What is Membrane Biogenesis ? 3
 (b) Where are Ribosomes located in the cell ? what is their function ?
12. (a) State Newton's second law of motion . 3
 (b) Using Newton's second law of motion derive the relation between force and acceleration .
13. A train starting from rest attains a velocity of 72km/h in 5 minutes. Assuming the acceleration is uniform, find 3
 (i) Acceleration
 (ii) The distance travelled by the train for attaining this velocity
14. Compare the three states of matter on the basis of 3
 (a) Intermolecular forces
 (b) Rigidity
 (c) compressibility

15. (a) Give the difference between solutions and colloids (Two points) 3
 (b) Name the two components of a colloid.
 (c) What is an emulsion? Give an example.
16. (a) What is an element? 3
 (b) Name a non-metallic element found in (i) liquid state (2) Gaseous state.
 (c) Give an example of a metalloid.
17. (a) Differentiate between Plasmolysis and Endocytosis 3
 (b) Name two cell organelles that have their own DNA and Ribosomes
18. Rahul/Reshmi decided to bring a bee of a foreign variety commonly used for commercial 3
 honey production. It was brought in to increase the yield of honey.
 a) Can you identify this foreign species of bee?
 b) Give the scientific name-
 c) Give any two advantages of using this species for commercial honey production.
19. (a) Distinguish between 'g' and 'G' 5
 (b) How does the value of 'g' vary with mass of the object?
 (c) An object weighs 294 N on the earth. What would be its mass on the moon?
20. (a) Derive the relation $S = ut + \frac{1}{2} at^2$ 5
 (b) Give the reason and the law related to the following statement
 It is difficult for a fireman to hold a hose which ejects large amount of water
 with high velocity
21. Draw a labelled diagram of Xylem. Name the four types of elements found in Xylem. 5
 With respect to Conduction, what is the main difference between Xylem and Phloem?
22. (a) State one similarity and one difference between evaporation and boiling. 5
 (b) Name the process involved in the following changes-
 (i) solid to liquid (ii) Gas to solid
 (c) What temperature in Kelvin scale is 50°C
23. (a) What is chromatography? Give its two applications. 5
 (b) Which separation technique will you apply for separating
 (i) Sodium chloride from its solution in water
 (ii) Petroleum products from crude petroleum.
24. (a) What is Genetic Manipulation? 5
 (b) How is it useful in Agricultural practices?
 (c) Give two uses of Manure in maintaining soil fertility

SECTION B

25. If common salt is added to an unsaturated solution of common salt in water it will 1
(a) become a colloid (b) become a suspension
(c) start showing tyndall effect (d) remain a true solution.
26. Copper sulphate on heating 1
(a) changes from blue to black (b) changes from blue to white
(c) liberates brown colour gas (d) changes from blue to brown
27. When do ice and water co-exist under atmospheric pressure? 1
(a) at 0°C (b) below 0°C (c) above 0°C (d) at 5°C
28. The smell of H_2S is 1
(a) pleasant (b) like that of rotten eggs
(c) like that of burning sulphur (d) none of these.
29. Two bodies when placed in contact exert forces parallel to the surface of contact. 1
This force is called:
(a) normal force (b) contact force
(c) gravitational force (d) frictional force
30. The organelle not observed in an animal cell is... 1
(a) Nucleus (b) Cytoplasm (c) Chloroplasts (d) Plasma membrane
31. Water enters the raisins through the process of 1
(a) Diffusion (b) Exosmosis (c) Endosmosis (d) Translocation
32. Some students observed cheek cells clearly under the microscope. The stain which they 1
might have used is..
(a) Safranin (b) Methylene blue (c) Acetocarmine (d) any of these
33. The solution whose concentration is greater than the internal concentration of the cell 1
is..
(a) Isotonic solution (b) Hypotonic solution (c) Hypertonic solution (d) none of these
34. Components of a mixture of common salt, sand and ammonium chloride are to be 2
separated. Select the correct sequence.
(a) sublimation, dissolving in water, filtration, evaporation
(b) sublimation, filtration, dissolving in water, evaporation
(c) sublimation, evaporation, dissolving in water, filtration
(d) evaporation, filtration, dissolving in water, sublimation

35 Magnesium ribbon burns in air with a dazzling white flame and leaves behind a residue . 2
Name the residue formed and state its colour .

36. The proper labeling of Parenchyma tissue from a) to d) is ... 2

- (a) cell membrane, cytoplasm, nucleus, air space
- (b) cell wall, cytoplasm, nucleus, intercellular space
- (c) cell wall, cell membrane, cytoplasm, nucleus
- (d) cell wall, nucleus, cytoplasm, cell membrane

