

SUMMATIVE ASSESSMENT - 1 (2016-17)  
CLASS VIII - SCIENCE

Max. Marks: 90

General Instructions:

- Read all the question carefully
- Make neat illustrations (well labeled)

**SECTION-A**

1. Why do astronauts appear floating inside a spaceship? (1)  
2. Why is Aluminum used in making airplane? (1)  
3. What is the basic difference between Prokaryotes and Eukaryotes? (1)

4. Identify the following as electrolytes and non-electrolytes and write in tabulation: (2)
- |                          |            |            |                           |
|--------------------------|------------|------------|---------------------------|
| a) Dil. HNO <sub>3</sub> | b) Benzene | c) Petrol  | d) Zinc Chloride solution |
| e) A solution of NaOH    | g) Ether   | h) Alcohol | i) Common salt solution   |

5. Define corrosion. Write two ways to slow down this process. (2)  
6. Which fiber is known as artificial silk? Write its two properties and one use. (2)  
7. State the function of Ribosomes and Mitochondria. (2)

8. Give one word for the following: (3)
- S.I unit of pressure
  - The amount or the strength of force is called its
  - Name the ions which are positively charged.
  - Name the scientist who invented a pump to extract air from a vessel
  - Electric current is the flow of negatively charged particles called
  - Force of friction exerted by fluids is called

9. Define electrolysis. Through diagram represent movement of ions during electrolysis W one important application of electrolysis in our daily life.

10. Describe any three applications of pressure?

11. Name the type of force which acts in each of the following cases
- A cricket ball rolling down on cricket field
  - A stone falling downward
  - A bullock cart is Ploughing a field
  - A woodcutter cutting a tree
  - A plastic ruler on being moved through dry hair, brought near dry pieces of straw
  - Fast moving wind driving a windmill
  - Falling of rain drops.

12. What are thermoplastic and thermosetting plastics? Give two uses of each.

13. Differentiate between metals and nonmetals on the basis of their physical properties

- 16 Silver nitrate should not be kept in copper vessel. Explain why? (3)
- 16 Expand PET, PS and HDEP. Write one use of each. (1.5x2=3)
- 16 Write the mode of transmission, causative organism and preventive measures for any two of the following diseases - Cholera, Typhoid, and Malaria. (1x3=3)
- 17 How many types of plastids are present in plants? State their use to the plant. (1x3=3)
- 18 Draw any three cells and explain how the shape of a cell depends upon the function it performs in our body? (1x3=3)
- 19 What is nitrogen fixation? Explain the role of microorganism in nitrogen cycle. (1+2=3)
- 20 Give reason for the following questions. (5)
- It is difficult to walk on the muddy surface
  - Porters place a round piece of cloth on their head
  - Sparks are produced when a pair of scissors is sharpened against a grinding wheel
  - Iron rails of the railway track fixed over wide wooden or concrete sleepers
  - A layer of zinc is coated on the iron objects.
- 21 Name the following- (1x5=5)
- Antibiotic extracted from bacteria.
  - Protein present in milk.
  - Scientist who discovered cell.
  - Unicellular algae which exist in colonies.
  - Fungus, which is visible to the naked eye.
- 22 Draw a neat illustration to show the detailed structure of animal or plant cell and label the following- Chloroplast, Endoplasmic Reticulum, Golgi bodies and chromosome. (3+2=5)
- 23 Explain with word equation what happens when (5)
- Hydrochloric acid reacts with aluminum.
  - Sulphur dioxide reacts with water
  - Sodium is placed in water.
  - Zinc granules are kept in copper sulphate solution.
  - Magnesium ribbon is burnt in air.
- 24 Solve the following numerical: (5)
- In a horse-cart, each of two horses pulls with a 1000N. Find the resultant force.
  - A solid body weighs 200N. When placed on a wooden plank, the area of contact found to be 10mt.sq. Find the pressure exerted by the solid body on the plank.
  - A force of 28N acts on an area of 25cm.sq. Calculate the pressure produced?
  - What is the force needed to produce a pressure of 1 Pascal over a square area of side 2m?
  - Over what area should a force of 100N act to produce a pressure of 500 Pascal.

**Section-B - MCQ (1 x 18 = 18)**

Choose the correct order:

- 25 The bulb will light up when:-
- Sample inserted will be non-conductor
  - Sample inserted will be conductor
  - Sample inserted will be a non-electrolyte