

I. MCQ

1. Which of the following is a liquid at room temperature?

- a) Iron b) Bromine c) Phosphorous d) Iodine

2. The most reactive metal is

- a) Copper b) Silver c) Potassium d) Calcium

3) Image formed by reflection from a plane mirror is.

- a) real and inverted
b) virtual and erect
c) real and erect
d) virtual and inverted

II. ANALOGY

3. Longest cell: nerve cell :: irregular shaped cell: White blood cell

4. Prism : Dispersion :: Water : Refraction

III. FILL IN THE BLANKS:

5. Electroplating is the process of coating one metal over using electricity.

6. All cells are filled with a jelly like material called cytoplasm

IV. GIVE THE SCIENTIFIC TERM FOR THE FOLLOWING:

7. Recycling unit of a cell: Lysosomes

8. The point where optic nerve enters the eye: Vitreous Humour

V. ANSWER THE FOLLOWING

9. Define Displacement reaction.

Ans. Displacement reaction is a chemical reaction where a highly reactive metal displaces a less reactive metal.

10. Differentiate between hypermetropia and myopia

Ans.

HYPERMETROPIA 1. It is also called long sightedness 2. The image is formed behind the retina. 3. It is corrected by convex lens	MYOPIA 1. It is also called short sightedness 2. The image is formed before the retina in the vitreous humour 3. It is corrected by concave lens.
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11. Draw a ray diagram to show the position of image formed when the object is placed within the focal length. Mention the characteristic of the image formed.

12. Differentiate between binary fission and budding.

BINARY FISSION 1. The parent cell itself divides into 2 new cells. 2. Eg. Bacteria	BUDDING 1. There is a formation of a new bud 2. Eg. Yeast
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13. Give two examples of each of the following:

(i) Bacterial disease: Tuberculosis, Cholera

(ii) Communicable diseases: Small Pox, Dengue

14. Write the function for the following:

(i) Ribosomes: It is the protein factory of the cell. It produces carbohydrates and protein for all the parts in the cell.

(ii) Mitochondria: It is the power house of the cell because it produces energy from food through cellular respiration.

15. Observe the diagram and answer the questions that follow:



a) Write a balanced chemical equation for the above reaction.

Ans. $\text{Fe} + \text{CuSO}_4 = \text{FeSO}_4 + \text{Cu}$

SELF BALANCED EQUATION

b) Why the blue colour copper sulphate changes to green colour when iron nail is dipped into it?

Ans. Blue colour copper sulphate changes to green colour when iron nail is dipped into it because here iron is more reactive than copper, So iron displaces copper forming iron sulphate.