

Final Unit (29 February 2016)

Class - VII

Paper- General Science

Time: 3hrs.

M.M. 90

*General Instructions:*

- i) This paper is divided into 3 sections namely Physics, Chemistry and Biology.*
- ii) All questions are compulsory.*
- iii) Draw diagram wherever required (with pencil)*

**Physics (30)**

1. Name the instrument which is used to indicate the speed of running vehicle. (1)
2. Which mirror is used as a shaving mirror? (1)
3. The process of sending back the light rays into same medium is called. (1)
4. Draw diagram of simple pendulum and define Amplitude. (2)
5. In a distance time graph. (2)
  - a) What type of motion does a straight line represent?
  - b) What type of motion does a curved line represent?
6. What is meant by dispersion of light? Name a natural phenomenon which is caused by dispersion of sunlight in sky? (2)
7. Draw the distance time graph for a stationary object (which is not moving) (2)
8. How does light enable us to see objects around us? (2)
9. With the help of ray diagram, define focal length of concave mirror. (2)
10. The distance between two stations is 300km. A train takes 5 hours to cover this distance. Calculate the speed of train. (3)
11. How can you distinguish a plane mirror, a concave mirror and a convex mirror without touching them? (3)
12. What is meant by uniform motion and non-uniform? Give one example of uniform motion.(3)
13. Write differences between concave lens and convex lens. (3)
14. a) What kind of lens is used as magnifying glass?
  - b) Name the type of mirror used by dentist.
  - c) How many colours are present in rainbow ?

**Chemistry (30)**

1. Name the acid found in vinegar. (1)
2. What is the name of the plant from which litmus is extracted? (1)
3. Out of these which one is a mixture-common salt or glass? (1)
4. What is neutralisation reaction? Give one example. (2)
5. Classify these into monoatomic, diatomic, triatomic or polyatomic (2)  
HNO<sub>3</sub>, Na, O<sub>3</sub>, H<sub>2</sub>
6. Why should factory waste be neutralized before discharging it into water bodies? (2)

7. How does turmeric indicator help us to find whether the given substance is acid or base? (2)
8. Find the molecular mass of Calcium sulphate,  $CaSO_4$ . (2)  
(Given Atomic Mass of  $Ca = 40 a.m.u.$ ,  $S = 32 a.m.u.$ ,  $O = 16 a.m.u.$ )
9. Write any three properties of the acids. (3)
10. Find out the molecular formula of - (3)  
a) Sodium hydroxide      b) Magnesium oxide
11. Differentiate between metals and non metals on the basis of - (3)  
a) Lustre      b) Hardness      c) Ductility
12. Balance the given word equation - (3)  
a) *Zinc + Hydrochloric acid* → *Zinc chloride + Hydrogen*  
b) *Sodium + oxide* → *Sodium oxide*
13. Define with example - (5)  
i) Symbol  
ii) Metalloids  
iii) Reactants  
iv) Natural acids  
v) Neutral substances

### Biology (30)

- I) Each question carries 1 mark. (3×1=3)**
1. Give full form of R.B.C.
  2. Name the instrument used to measure the humidity.
  3. Name the tissue which conducts water in the plant.
- II) Each question carries 2 marks. (4×2=8)**
1. What is ascent of sap?
  2. What is fertilization?
  3. Define adaptation.
  4. Name the organs of human excretory system.
- III) Each question carries 3 marks. (3×3=9)**
1. Differentiate between sexual reproduction and asexual reproduction. (any three)
  2. Give any three differences between arteries and veins.
  3. Give any three adaptive features in polar bear which help it to live in polar region.
- IV) Draw a neat and well labelled diagram of the structure of a flower. (1×5=5)**
- V) Give any five functions of the blood. (1×5=5)**