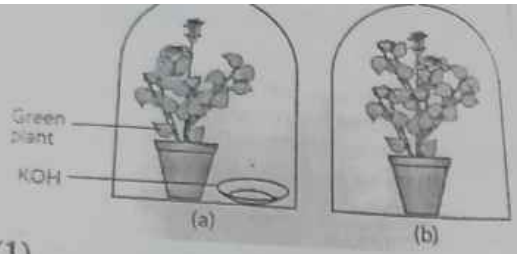
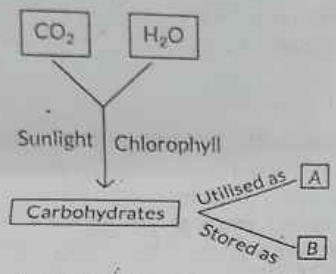


(1)

a) Both potted plant are kept in dark room for at least 3 days.
b) bottom of jar is sealed to make the air tight.
c) both ported plants are kept in sunlight after the starch test.
d) A leaf from the both plant is taken to test the presence of starch.

Q2) In the following flowchart showing autotrophic nutrition in green plants , A and respectively are:-(1)



a) Oxygen and energy.
b) Starch and oxygen.
c) Energy and starch
d) Oxygen and water.

Q3-. A stomata closes when:-(1)

i) It needs carbon dioxide for photosynthesis.iii) water flows out of the guard cells.
ii) it does not need carbon dioxide for photosynthesis. iv) water flows into the guard cells
The correct processes are :- a)(i) only. b) ii) and iii) c)i) and iii). d)ii) and iv)

Q4-. In which of the following groups of organism, food material is broken down outside a body and then absorbed in? (1)

a)Mushroom ,green plants , Amoeba. **b)**Yeast, mushroom , bread mould
c)Paramecium, Amoeba , Cuscuta. **d)**Cuscuta, lice, tapeworm.

Q5-Write a balanced chemical equation involved in photosynthesis. **(1)**

Q 6- What happened to the carbohydrates which are not immediately used by plants ? **(1)**

Q7-Define the food making process of plant. Name the organelle in which photosynthesis take place. Where does the oxygen liberated come from during this process? **(2)**

Q 8- what happened to the rate at which green plants will prepare food- **(2)**

1) during cloudy weather. **2)** when stomata getting blocked due to dust.

Q.9-state in proper sequence the events occur in photosynthesis. Also state how events occur in synthesis of food by desert plant . **(3)**

Part -B (Chemistry)

Q1. Consider the following chemical equation:

$pAl + qH_2O \rightarrow rAl_2O_3 + sH_2$

To balance the chemical equation, the value of p, q, r and s must be respectively.

(i) 3, 2, 2, 1. (ii) 2, 3, 3, 1 (iii) 2, 3, 1, 3 **(iv) 3, 1, 2, 2.**

Q2. A student took sodium sulphate solution in a test tube and added barium chloride solution to it. He observed that an insoluble substance has formed. The colour and molecular formula of the insoluble substance is

Signature of Principal/ Administrator

Marks

(i) Grey, $BaSO_4$ (ii) Yellow, $Ba(SO_4)_2$ (iii) White, $BaSO_4$ (iv) Pink, $BaSO_4$

Q3. Consider the following cases :

(A) $CaSO_4 + Al$. (b) $CuSO_4 + C$ (c) $FeSO_4 + Cu$. (d) $ZnSO_4 + Mg$

The cases in which new product will form are

(i) a and b. (ii) b and c (iii) c and d. (iv) b and c

Q4. X be a green coloured compound which on thermal decomposition firstly loses its water of crystallisation and changes into Y compound (colour White). Then on further heating it changes into reddish brown compound Z. Identify X, Y and Z. Also write complete Reaction taking place . 2.

Q5. Why does the colour of copper sulphate solution change when an Iron nail is dipped in it? Write chemical equation also. 1.5

Q6. Why Respiration is considered an Exothermic Reaction? Explain. Write balance chemical equation also 1.5

Q7. Explain double displacement Reaction and its types with examples. 2

Section –C (Physics)

Q1. What do you mean by (2 Marks)

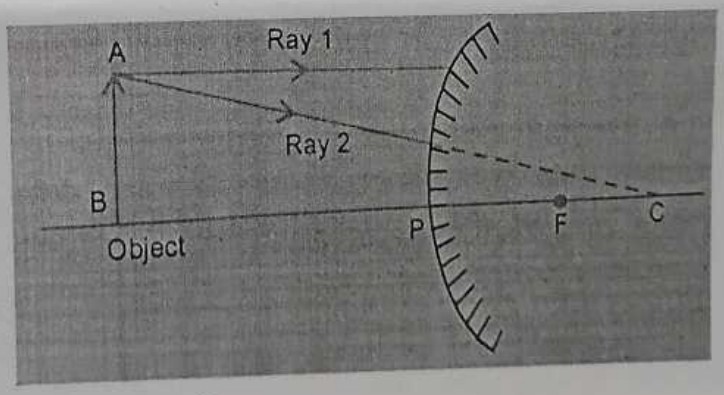
(i) Focus (ii) centre of curvature (iii) radius of curvature of a mirror

Q2. Draw a ray diagram for the formation of image formed by a concave mirror when position of object . Also write position , nature and size of the image. (3 Marks)

(i) Beyond C (ii) between P and F. (Iii) At C

Q3. Why does a ray of light passing through the centre of curvature of a concave mirror after reflection, is reflected back along the same path? (2 marks)

Q4. Complete the following ray diagram to show the formation of image.(1 mark)



Q5. What is the angle of reflection and total angle between incident ray and normal Ray in th figure below. (2 marks)