PERL EDUCATION



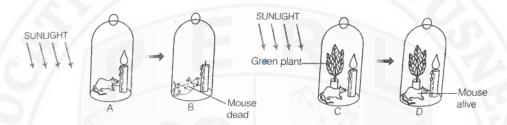
REVISION PRACTICE PAPER

PHOTOSYNTHESIS

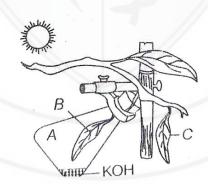
BIOLOGY

ICSE - X (CAM)

- 1. The given diagram represents the relationship between a mouse and a physiological process that occurs in green plants. Study the diagrams and answer the questions that follow
 - a) Name the physiological process occurring in the green plant that has kept the mouse alive.
 - b) Explain the physiological process mentioned above.
 - c) Why did the mouse die in bell jar B?
 - d) What is the significance of the process as stated in (i) for life on earth?
 - e) Represent the above-mentioned physiological process in the form of a chemical equation.



- 2. The figure given alongside represents an experiment to demonstrate a particular aspect of photosynthesis. The alphabet 'A' represents a certain condition inside the flask. Observe the diagram and then answer the following questions.
 - a) What is the aim of the experiment?
 - b) What happens to the leaf when tested with iodine?
 - c) Which chemical can be used as an alternative of KOH?
 - d) What happen to the leaf B and leaf C at the end of the starch test?



- 3. Briefly explain photophosphorylation Or Define the term photophosphorylation.
- 4. State the exact location of the chloroplast.
- 5. Differentiate between the following pair on the basis of what is mentioned in bracket?
- 6. Photolysis and photophosphorylation (definition)
- 7. State the main function of thylakoids.
- 8. Differentiate between the following pair on the basis of what is mentioned in bracket? Stoma and stroma. (describe its structure). Name that part of the chloroplast where the light reaction of photosynthesis takes place.
- 9. Give one point of difference between the following on the basis of what is given in the bracket?
- 10. Light reaction and dark reaction. (site of occurrence)

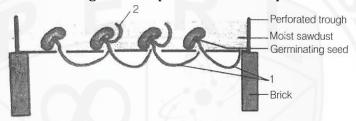
- 11. Give the biological/ technical term for the process of conversion of several molecules of glucose to one molecule of starch.
- 12. Why is sleeping under a tree at night not advisable?
- 13. Name the cell organelle responsible for photosynthesis.
- 14. State whether the following statement is true of false. If false, write the correct form of the statement by changing the first of last word only. Photosynthesis occurs in all the cells of the plant.
- 15. Explain the term photolysis in photosynthesis.
- 16. Name the ground substance present in a chloroplast.
- 17. Mention any three adaptations found in plants to favour the process of photosynthesis.
- 18. Write true or false. Correct the false statements by changing the last word only. Plants that manufacture their own food are called heterotrophs.
- 19. Rewrite the completed explanation by inserting a key word in the space indicated by 'photolysis is the splitting of water molecules into hydrogen ions and hydroxyl ions in the presence of " and light.
- 20. Account for the given below briefly.

 Animals owe their existence to chlorophyll.
- 21. Name of following. cytoplasmic organelle the help in the manufacture of starch.
- 22. The dark reaction of photosynthesis is light independent. Write true of false.
- 23. Give reason-Green leaves are thin and broad.
- 24. Give the exact location and one function of thylakoids.
- 25. Given below is biological statement which is incomplete and hence, is incorrect. Rewrite the correct form of the statement by inserting a suitable word/words at the right place. Do not delete any word already given in the statement. Under the inserted word/words.

 The splitting of water molecules into hydrogen ions and hydroxyl ions is termed as photolysis.
- 26. Write the full form of NADP and ADP.
- 27. Name the part of the chloroplast where the dark reaction of photosynthesis takes place.
- 28. Mention the reactants of photosynthesis.
- 29. What do the abbreviation stand for ATP?

Chemical control & co-ordination

- 1. Name a hormone which
 - a. Is gaseous in nature
 - b. Is responsible for phototropism
 - c. Breaks apical dominance
 - d. Is used for killing weeds(dicots)
 - e. Induces flowering in long day plants
- 2. Given below is experimental setup demonstrate a particular tropic movement in germinating seeds. Study the diagram and answer the questions that follows:
 - a. Label the parts 1 and 2
 - b. Name the tropic movement shown by part 1.
 - c. Part 1 is affected by two stimuli. Name them. Which one of the two is stronger?
 - d. what is thigmotropism? Give one example.
 - e. What is meant by 'positive' and 'negative' tropic movement in plants?



- 3. Give the full form of ABA
- 4. What is the full form of IAA?
- 5. State the main functions of cytokinins.
- 6. What is parthenocarpy? Give one example.
- 7. Name the following
 - a. A hormone which delays fall of leaves.
 - b. A hormone which prevents ageing of plant parts.
- 8. Name one plant growth hormone, which retards growth during extremely dry season.
- 9. Name the plant hormones responsible for the following
 - a. Elongation of cells
 - b. Growth of stem
 - c. Promotion of cell division
 - d. Falling of senescent leaves
- 10. What do we call the movement of shoot towards light?
- 11. A young green plant receives sunlight from one direction only. What will happen to its shoot and roots?
- 12. Why are roots known as positively geotropic?
- 13. Name any two types of tropic movements.
- 14. In what way tropic movements are different from other types of movements.
- 15. Give technical terms for followings events.
 - a. The movement of roots in response to presence of water/moisture nearby
 - b. The movement of plant parts towards a chemical substance.
- 16. The electrical-chemical signals are not considered an efficient means of communication in plants? Give reason.
- 17. How does control and coordination is carried out in plants?