

THE INDIAN SCHOOL, KINGDOM OF BAHRAIN

HOLIDAY ASSIGNMENT - 2013

BIOLOGY - IX

A. Practice all the diagrams given in the text book.

B. Practical portions-

Expt 1. Onion peel cells

Expt 2. Human cheek cells

Expt 3. Food test

Expt 4. Plant tissues

Expt 5. Animal tissues

Expt 6. Osmosis

C. Go through all these experiments and question answers given in the lab manual and prepare from MCQ text book

D. Work out the chapter wise assignments and the following questions taken from board papers and submit on opening day.

1. Name the plant tissues found in the husk of a coconut and identify the chemical responsible for its stiffness.
2. Give an example of an Indian and a foreign poultry breed. Mention any desirable trait expected from crossing different breeds.
3. What happens to an animal cell when it is placed in a very dilute external medium? Why?
4. What are the two ways of obtaining fish?
5. Name the plastid involved in conversion of a green tomato to red.
6. Show the location of meristematic tissues in a plant diagrammatically.
7. Draw a labelled diagram of the muscle tissue which never shows fatigue.
8. Name the connective tissue which helps in repair of tissues. State where this tissue is found.
9. Name the process through which *Amoeba* acquires food.
10. A student performs an experiment by placing the de-shelled egg in a concentrated salt solution for 5 minutes. What changes did he observe in the egg? Give reason for the same.
11. As plants grow older, the outer protective tissue of the stem changes into cork. How does this happen? List two salient features of cork.
12. Name the kinds of muscles found in your limbs and lungs. How do they differ from each other structurally and functionally?

Multiple choice questions

1. The features that best describes the cells of parenchyma cells are:

- (a) Dead cells, thick walled, no intercellular spaces
- (b) Living cells, thin walled, no intercellular spaces
- (c) Dead cells, thin walled, large intercellular spaces
- (d) Living cells, thin walled, large intercellular spaces

2. The appearance of magenta colour on adding conc. HCl to a given sample of solution of dal confirms the presence of

- a) agremone oil in the dal
- b) Potassium dichromate in the dal
- c) Saw dust in the dal
- d) Metanil yellow in the dal

3. While preparing a temporary mount of the cheek cells, the reason behind staining the cells is

- a) To prevent the cells from drying quickly
 - b) To preserve them
 - c) To disinfect them
 - d) To make the organelles clearly visible
4. A slide given to you for identification consists of long narrow dead cells which have thick boundaries. Under which tissue would you place them?
- a) Sclerenchyma
 - b) Collenchyma
 - c) Parenchyma
 - d) Meristematic
5. Meena mounted an onion peel and observed with the help of the compound microscope. The components of the cell which would be seen are:
- a) Plasma membrane, mitochondria, nucleus
 - b) Cell wall, nucleus, golgi apparatus
 - c) Cytoplasm, nucleus, plasma membrane
 - d) Cell wall, cytoplasm, nucleus
6. A student soaked 10 g raisins in 75 ml of distilled water in two beakers A and B. He maintained the beaker A at 20°C and the beaker B at 40°C. After an hour, the percentage of water absorbed will be:
- a) Same in beaker A and B
 - b) More in A than in B
 - c) More in B than in A
 - d) Twice as much in B as in A
7. The cell body of a nerve cell is called:
- a) Cyton
 - b) axon
 - c) neuron
 - d) dendrite