

SKELETON QUESTION PAPER

[Time: 3 Hours]

BIOLOGY PRACTICAL

[Max. Marks: 30]

Part A

Major experiment (Any one out of the following) :

[Marks : 4]

Q. 1. Make a temporary potato osmoscope to study osmosis. Sketch and label the diagram showing the change in the water level.

OR

Make a temporary slide to study plasmolysis. Sketch and label the diagram.

OR

Make a temporary mount of leaf epidermis to study the structure and distribution of stomata. Sketch and label the structure of stomatal apparatus.

OR

Find out the adulteration of the given milk sample, for water and starch.

OR

Perform the experiment to isolate DNA from given sample. Show your result to the examiner.

Minor experiments :

[Marks : 3]

Q. 2. Dissect the given flower to display the floral whorls. Take a T.S. or V.S. of ovary to show number of chambers (locules). Sketch and label the diagram.

OR

Make a temporary preparation to show pollen germination. Draw neat and labelled diagram of the same.

OR

Calculate population density/ frequency of any one plant species by quadrat method.

Minor experiments :

[Marks : 3]

Q. 3. Perform the suitable tests to compare the given water sample(s) for its/their pH and clarity. Make a note of its/their pH and clarity.

OR

Perform the suitable tests to compare the given soil samples for their pH and type. Make a note on their pH and soil type.

OR

Perform the suitable test to compare the given leaf samples for the presence of particulate matter. Make a note of the same.

OR

Make a temporary mount of given water sample. Prepare a report for the presence of different planktons.

Part B

Q. 4. **Spotting : (Identify the following 10 spots-)**

[Marks : 10]

Spot A: Name the plant and write on floral adaptations for type of pollination

Spot B: Any one experiment from plant physiology.

Spot C: Identify the plant and comment on its morphological adaptations

Spot D: Permanents slide

Spot E: Comment of the given pedigree chart.

Spot F: Identify the disease and comment on control measures.

Spot G: Identify the stage of meiosis in the given slide.

Spot H: Identify the animal and comment

Spot I: Name the part/parts indicated by marker in the model/chart and enlist their functions (ovule V.S.).

Spot J: Comment on the given pedigree chart with respect to the inheritance of trait.

Part C

Q. 5. Project report.

[Marks : 5]

Q. 6. Viva voce (on question no. 1 to 3)

[Marks : 2]

Q. 7. Practical notebook (Certified journal)

[Marks : 3]