

BIOLOGY

H.S.C BOARD PRACTICAL EXAMINATION- MAY-JUNE 2021

Following experiments to be prepared by the XII STD students for their HSC Board BIOLOGY Practical Examination - 2020-21

LIST OF THE EXPERIMENTS WITH MARKING SCHEME: 30 Marks – Total

(Balbharati – Biology Practical Notebook)

Part A:

Q.1. List of major experiments to be performed. (04 Marks)

- **Dissect the given flower to display the floral whorls. Sketch and label the diagram.**
 - Floral Display with labels – 3 marks
 - T.S. of ovary diagram – 1 mark

Q.2. List of minor experiments to be performed. (03 Marks)

- **Make a temporary potato osmoscope to study osmosis. Sketch and label the diagram showing the change in the water level.**
 - Principle – 1 mark
 - Observation & Inference (Conclusion) – 1 mark
 - Diagram (Pg. No. 05 Fig. A) – 1 mark

OR

- **Calculate population density/ frequency of any one plant species by quadrat method.**
 - Observation table (Pg. No. 39) – 1 mark
 - Calculations (Population Density/Frequency) – 1 mark
 - Result – 1 mark

Q.3. List of minor experiments to be performed. (03 Marks)

- **Perform suitable tests to compare the given water samples for their pH and Clarity. Make a note of their pH and Clarity.**
 - Result table for pH (pg.no. 32) – 1 ½ mark
 - Result table for clarity (pg.no. 33) – 1 ½ mark

OR

- **Perform the suitable tests to compare the given soil samples for their pH and type. Make a note of their pH and soil type.**
 - Result type of soil (Table on pg. no. 23) – 1 ½ mark
 - Result pH of soil (Table pg.no. 25) – 1 ½ mark

Part B:

Q.4. List of spotting experiments. (4 Spots – 2 ½ marks each)

- **Spot A** – Name the plant and write on floral adaptations for type of pollination. (Wind or Insect pollination)
 - Identify with example (Maize/ Salvia) – 1 mark
 - Description (any 3 valid points) – 1 ½ mark
- **Spot D** – Permanent slide of T.S. of testis/ T.S. of ovary/ V.S. of blastula.
 - Identify – 1 mark
 - Description (any 3 valid points) – 1 ½ mark
- **Spot H** – Identify the animal and comment on its xeric adaptations/ aquatic adaptations.
 - Identify with example (Camel/ Kangaroo Rat/ Rohu/ Dolphin) – 1 mark
 - Description (any 3 valid points) – 1 ½ mark
- **Spot I** – Name the part indicated by marker in the chart, describe and enlist its functions. (V.S of Anatroous ovule).
 - Identify – 1 mark
 - Description & Functions (any 3 valid points) – 1 ½ mark

Part C:

Q.5. Project Report (05 Marks)

Q.6. Viva Voce (Based on Q.1 to Q.3) (02 Marks)

Q.7. Certified Journal (Practical Notebook – by Balbharati) (03 Marks)

❖ Students are expected to know the following for Biology Practical Examination:

- **Dissection kit with sharp blade is mandatory** for biology practical exam.
- **Carry hall tickets.**
- **For Viva question and answers** – Refer to the Question and answers given for above list of experiments IN THE PRACTICAL NOTEBOOK.
- **Keep your journal completed** WITH PROJECT & CERTIFICATION PAGE (pg. no. 155) DULY FILLED.

- Carry your own stationary. Sharing of stationary will not be allowed.
- Wear a mask and carry sanitizer.
- Cover practical notebook with brown paper and write HSC Seat No. on cover page.
- Carry water bottle and snacks.
- **SUBMISSION OF COMPLETED JOURNAL FOR CERTIFICATION-**
22 MAY 2021 TO 10 JUNE 2021

***** Practical examination will be conducted from 22 May 2021 to 10 June 2021.**

The detailed schedule will be displayed on College website as and when the College receives the same from the HSC Board.

 **All the best** 

Biology Department: 1. Mrs. Manisha Chabukswar
2. Ms. Deepaxi Patankar
3. Ms. Jessica Gonsalves