BBYCT-135

ASSIGNMENT BOOKLET

Bachelor's Degree Programme

(BSCG)

(Plant Anatomy and Embryology)

Valid from 1st January, 2023 to 31st December, 2023

School of Sciences
Indira Gandhi National Open University
Maidan Garhi
New Delhi-110068

(2023)

Dear Student,

Please read the section on assignments in the Programme Guide for B. Sc. that we sent you after your enrolment. A weightage of 30 per cent, as you are aware, has been earmarked for continuous evaluation, **which would consist of one tutor-marked assignment** for this course. The assignment is in this booklet, and is of 100 marks, of which 35% are needed to pass it.

Instructions for formatting your Assignments

Before attempting the assignment please read the following instructions carefully:

1) On top of the first page of your answer sheet, please write the details exactly in the following format:

ROLL NO.: ……

NAME: ……

ADDRESS: ……

……

……

COURSE CODE: ……..

COURSE TITLE: ……..

ASSIGNMENT NO.: ……

STUDY CENTRE: ……..... **DATE:** ……..

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

2) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.

3) Leave 4 cm margin on the left, top and bottom of your answer sheet.

4) Your answers should be precise.

5) Solve this assignment, and **submit the complete assignment answer sheets within the due date.**

6) The assignment answer sheets are to be submitted to your Study Centre within the due date. **Answer sheets received after the due date shall not be accepted.**

   We strongly suggest that you retain a copy of your answer sheets.

7) This assignment is **valid from 1st January 2023 to 31st December, 2023**. If you have failed in this assignment or fail to submit it by December, 2023, then you need to get the assignment for the year 2024, and submit it as per the instructions given in the Programme Guide.

8) **You cannot fill the examination form for this course** until you have submitted this assignment.

We wish you good luck.

ASSIGNMENT

Course Code: BBYCT-135
Assignment Code: BBYCT-135/TMA/2023
Maximum Marks: 100

Note: Attempt all questions. The marks for each question are indicated against it.

1. Write short notes on the following: (2×5=10)

   i) Dendrochronology

   ii) Statocytes/Statocysts

   iii) Microsporogenesis

   iv) Histogenesis

   v) Stomatal index

2. Explain the different theories of root apical organization. (15)

3. Describe three main types of endosperms recognized in angiosperms on the basis of their mode of development. Support your answer with the help of well labelled diagram showing the different stages of the development of endosperm in each types. (15)

4. Describe any three types of specialized epidermal cells with the help of a well labelled diagram. (15)

5. Differentiate between the following: (3×5=15)

   i) Dicot root and Monocot root

   ii) Glandular and Non-glandular trichomes

   iii) Amoeboid and Secretory tapetum

   iv) Dicotyledonous and Monocotyledonous embryo

   v) Calyx and Corolla

6. Describe the structure of embryo sac with the help of a well labelled diagram. (10)

7. Compare the structures of primary and secondary root. (10)

8. Enlist the categories of xerophytes. Describe the morphological and anatomical adaptations found in xerophytes. (3+7=10)