

ASSIGNMENT BOOKLET
Bachelor's Degree Programme (B.Sc.)

Plant Diversity-II

Valid from 1st January 2022 to 31st December 2022

**It is compulsory to submit the Assignment before filling in the
Term-End Examination Form.**

Please Note

- You can take electives '56 to 64' credits from a minimum of TWO and a maximum of FOUR science disciplines, viz. Physics, Chemistry, Life Sciences and Mathematics.
- You can opt for elective courses worth a MINIMUM OF 8 CREDITS and a MAXIMUM OF 48 CREDITS from any of these four disciplines.
- At least 25% of the total credits that you register for in the elective courses from Life Sciences, Chemistry and Physics disciplines must be from the laboratory courses. For example, if you opt for a total of 64 credits of electives in these 3 disciplines, at least 16 credits 'out of those 64 credits' should be from lab courses.
- You cannot appear in the Term-End Examination of any course without registering for the course. Otherwise, your result will not be declared and the 'responsibility will be yours'.



School of Sciences
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(2022)

Dear Student,

We hope you are familiar with the system of evaluation to be followed for the Bachelor's Degree Programme. At this stage you may probably like to re-read the section on assignments for Elective Courses in the Programme Guide 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 (TMA)** for this course.

Instructions for Formatting Your Assignments

Before attempting the assignment please read the following instructions carefully.

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

ENROLMENT 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) While solving problems, clearly indicate the question number along with the part being solved. Be precise.
- 6) **This assignment will remain valid for one year from January 1, 2022 to December 31, 2022.** However, you are advised to submit it within **12 weeks** of receiving this booklet to accomplish its purpose as a teaching-tool. Answer sheets received after the due date shall not be accepted.
- 7) **You cannot fill the exam form for this course until you have submitted this assignment.**

We strongly feel that you should retain a copy of your assignment response to avoid any unforeseen situation and append, if possible, a photocopy of this booklet with your response.

We wish you good luck!

ASSIGNMENT (Tutor Marked Assignment)

Course Code: LSE-13
Assignment Code: LSE-13/TMA/2022
Max. Marks: 100

1. Match the items in column A with those of column B.

<u>Column A</u>	<u>Column B</u>	(1×5=5)
i) Mostly used for paper industries	a) <i>Zamia pygmaea</i>	
ii) The smallest gymnosperm	b) <i>Allium cepa</i>	
iii) <i>Welwitschia</i>	c) Rubiaceae	
iv) Onion	d) <i>Picea sp.</i>	
v) Myrmecophily	e) Handicapped plant	

2. a) Draw labelled diagrams of the following: (2½×4=10)

- i) T. S. of needle of *Pinus*
- ii) T. S. of root of Orchid
- iii) L. S. of Caryopsis (*Zea mays*)
- iv) T. S. of Citrus fruit

- b) Give the botanical names of the following: (1×5=5)

- i) Clove
- ii) Papaya
- iii) Soybean
- iv) Tomato
- v) Cashewnut

3. Briefly explain the following term and write the name of family where the structure is found: (1×5=5)

- i) Monadelphous stamens
- ii) Pollinium
- iii) Gynobasic Style
- iv) Jaculator
- v) Verticillaster Inflorescence

4. Classify parenchyma tissue with proper diagram on the basis of their functional diversity. (5)

5. Write the steps involved from the time coffee berries until drinking coffee powder is prepared. (10)
6. List the common adaptations found in angiosperms that prevent or minimize self pollination. (5)
7. List any ten plant species from which spices are obtained. Give their botanical name, and plant parts that are used as spices. (5)
8. a) Write the botanical names of six vegetable oil producing plants. (3+2=5)
b) Describe the characteristic features of carnivorous plants. (5)
9. Discuss the adaptations in leaf, stem and roots of angiospermic plants that made it most dominant form of plants in the world. (10)
10. Compare the families Brassicaceae and Malvaceae with the reference to the following features: (10)
Leaf, Inflorescence, Flowers, Androecium, Gynoecium
11. Compare the families Musaceae and Liliaceae with the reference to the following features: (10)
Leaf, Inflorescence, Flowers, Androecium, Gynoecium
12. a) Compare the female gametophyte of *Pinus* and *Gnetum* with proper diagrams. (5)
b) Compare the normal and coralloid roots of *Cycas* with well labelled diagrams. (5)