BBYCT-133

ASSIGNMENT BOOKLET

Bachelor's Degree Programme

(BSCG)

(Plant Ecology and Taxonomy)

Valid from 1st January, 2020 to 31st December, 2020

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

(2020)

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 it consists of two parts, Part A and B. The total marks of all the parts are 100, 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 Part A and Part B of 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, 2020 to 31st December, 2020**. If you have failed in this assignment or fail to submit it by **31st December, 2020**, then you need to get the assignment for the year 2020-21, 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-133
Assignment Code: BBYCT-133/TMA/2020
Maximum Marks: 100

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

Part A

1. Complete the following sentences in one word. (1×5=5)

   i) The term 'ecology' was coined by……. .

   ii) The term 'ecosystem' was proposed by……. .

   iii) In a population the individual belong to same……. .

   iv) The process of change in communities with the course of time is called ……. .

   v) In……. type of biotic interaction both the species get benefitted.

2. Describe the major components of soil and importance of soil biota. (10)

3 'Changes in temperature influence the geographical distribution of living organisms'. Explain. (10)

4. Describe various stages of community development (succession) in a water body (hydrosere). (10)

5. 'Carbon gets exchanged between lithosphere, hydrosphere, and atmosphere of the Earth'. Explain with the help of a well labeled diagram. (10)

Part B

6. a) Fill in blanks with appropriate word(s) : (1×3 =3)

   i) The 'Gana' "Swastikagniyam" of ancient India is recognised today as family ……. .

   ii) ..... proposed the term taxon.

   iii) Plant classification establishes and determines …….. and …… .

   b) Choose the correct alternative from the provided : (1×4=4)

   i) Palm houses, ferneries are characteristic of (Kew Garden / Western Circle Herbarium).

   ii) (Manual/Revision) is an example of provisional document.

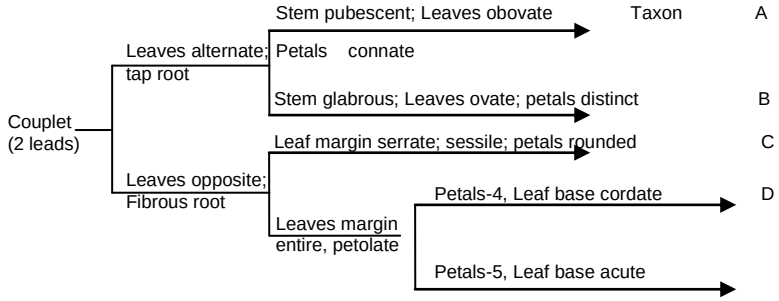
   iii) Chemically raphides are (Calcium sulphate/Calcium oxalate).

   iv) The taxonomic rank class is designated with the suffix (opsida /ales) at the end.

7. a) List the characteristics of the pollen grains that are useful as taxonomic evidences. (5)

b) Define the term species and briefly discuss the species concept. (5)

8. a) Observe the following dichotomy of characters and prepare (a) a bracketed key and (b) an indented key. (8)



b) Differentiate between artificial, natural and phylogenetic system of classification of plants. (5)

9. Briefly describe the procedure adopted by Numerical taxonomists. (10)

10. a) Discuss the importance of system of binomial nomenclature. (3)

b) Differentiate between : (12)

i) Monophyletic and polyphyletic groups

ii) Cladogram and Phenogram

iii) Apomorphic and Plesiomorphic characters