

(i) Printed Pages : 4

Roll No. ....

(ii) Questions : 9

Sub. Code :

1	0	1	6	5
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Exam. Code :

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NEP U.G. Common-Skill Enhancement Course 1<sup>st</sup> Semester  
(2125)

BOTANY

Paper : Basic Lab and Field Skills in Botany BOTSEC1

Time Allowed : Three Hours]

[Maximum Marks : 45

Note :—Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit. Illustrate your answer wherever necessary.

I. A. Multiple Choice Questions :

i. Function of condenser in an optical microscope is :

- a. Focus
- b. Measure's lens ability to gather light
- c. Magnifies
- d. None of the above

ii. Standard size of an herbarium sheet is :

- a. 28 × 29 cm
- b. 21.25 × 28.75 cm
- c. 41 cm × 29 cm
- d. 31.25 × 28.75 cm

- iii. Which botanical garden in the U.S. is well known for its large collection of North American Plants?
- a. New York Botanical Garden
  - b. Royal Botanical Garden, Kew
  - c. Singapore Botanical Garden
  - d. Shinjuku Gyoen
- iv. Type of conservation supported by botanical gardens through their living plant collections is termed as :
- a. Ex-situ conservation
  - b. In-situ conservation
  - c. Aquatic conservation
  - d. Forest conservation
- v. Concentration of solution in terms of moles per solute dissolved per litre of the solution is termed as :
- a. Normality
  - b. Molarity
  - c. Molality
  - d. Percent Solution

5×1=5

B. Fill in the blanks :

- i. \_\_\_\_\_ is the commonly used medium for permanent mounting of specimens.
- ii. Turning physical plant samples into digital files is called \_\_\_\_\_.
- iii. The \_\_\_\_\_ gardens in London is famous for its wide range of plant collections and important research.
- iv. Buffers are used to keep the \_\_\_\_\_ of a solution stable. 4×1=4

### UNIT—I

II. Describe the steps involved in the sample and slide preparation. 9

OR

III. Explain in detail the components, working of compound microscope along with relevant diagram. 9

### UNIT—II

IV. Elaborate in detail the process of collection and preservation of plant samples. 9

OR

V. What is Herbarium and elaborate its significance? Write a short note on Virtual herbarium. 9

### UNIT—III

VI. What are botanical gardens? Discuss the role of Botanical gardens. 9

OR

VII. Enlist important botanical gardens of India. Write a short note on any one of the International botanical gardens and any one of the National Botanical Gardens of India. 9

### UNIT—IV

VIII. Define Normality. Explain in detail the procedure to measure pH of a solution. 9

OR

IX. Differentiate between Molarity and Molality. Explain in detail the procedure to prepare 0.5M NaCl solution 100 ml where molecular weight of NaCl is 58.55 g/mol. 9