

B.Sc. T.Y. (CBCS Pattern) Semester-VI  
**012E DSE-II - Botany Elective Paper-II - Plant Diversity & Conservation-II**

P. Pages : 2

Time : Three Hours



**GUG/S/25/13328**

Max. Marks : 50

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- Notes : 1. All questions are compulsory.  
2. Draw well labeled diagram wherever necessary.

1. a) Write in detail definition and concept of Conservation. 5  
b) Values and ethics of conservation. 5

**OR**

Write note on:

- c) The forest Act. 2½  
d) The biodiversity Act. 2½  
e) Action plan of conservation. 2½  
f) The wildlife protection Act. 2½
2. a) Explain in detail role of Biosphere reserves. 5  
b) Importance of National parks in conservation. 5

**OR**

Write note on:

- c) Chipko movement. 2½  
d) Narmada Bachao Andolan 2½  
e) Kalpavriksha 2½  
f) Wildlife trust of India. 2½
3. a) Explain in detail scope and concepts of basic techniques in plant tissue culture technology. 5  
b) Explain in detail role of growth regulators in culture media. 5

**OR**

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|-----------|---|----------|
| c)        | Requirements for tissue culture laboratory.                               | 2½       |
| d)        | Heat and wet method of sterilization.                                     | 2½       |
| e)        | Role of Gelling agents in culture media.                                  | 2½       |
| f)        | Organic nutrients in culture media.                                       | 2½       |
| <b>4.</b> | a) Explain in detail Clonal propagation strategies.                       | <b>5</b> |
|           | b) Explain role of tissue culture in improvement of horticultural plants. | <b>5</b> |

**OR**

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|-----------|--|---------------------|
| c)        | Biotechnology and current tissue culture techniques.                           | 2½                  |
| d)        | Economically important traits in agricultural.                                 | 2½                  |
| e)        | In vitro propagation of Hibiscus.  | 2½                  |
| f)        | Selection of superior biotypes of Jasmine.                                     | 2½                  |
| <b>5.</b> | Write answer in two to three line only for any ten (Diagram is not necessary). | <b>10x1<br/>=10</b> |
| a)        | Wildlife   | <b>1</b>            |
| b)        | Biological resource.   | <b>1</b>            |
| c)        | Forest   | <b>1</b>            |
| d)        | Sanctuary  | <b>1</b>            |
| e)        | Cryobank   | <b>1</b>            |
| f)        | BNHS   | <b>1</b>            |
| g)        | MS medium.   | <b>1</b>            |
| h)        | Callus   | <b>1</b>            |
| i)        | Morphogenesis  | <b>1</b>            |
| j)        | Germplasm  | <b>1</b>            |
| k)        | Biotypes   | <b>1</b>            |
| l)        | Propagation  | <b>1</b>            |

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