2025/11

SET A

M.Sc. BOTANY
THIRD SEMESTER
ANGIOSPERM TAXONOMY
MSB-304(C)

[USE OMR FOR OBJECTIVE PART]

Duration: 1.30 hrs. **Full Marks: 35**

Objective

Time: 15 min. **Marks: 10**

Choose the correct answer from the following: *1X10=10*

1. Which type of key is most commonly used in plant identification?
   a. Circular key
   b. Dichotomous key
   c. Alphabetical key
   d. Molecular key

2. Field identification of plants is best supported by
   a. DNA barcoding
   b. Herbarium comparison
   c. Microscopic slide preparation
   d. Laboratory culturing

3. The process by which wild plants are adapted for human use through selection and cultivation is called
   a. Hybridization
   b. Domestication
   c. Mutation
   d. Acclimatization

4. Plants are essential for life because they
   a. Produce oxygen
   b. Form the base of food chains
   c. Provide medicines and shelter
   d. All of the above

5. In a dichotomous key, each step offers
   a. Three alternatives
   b. One alternative
   c. Two contrasting statements
   d. No alternatives

6. According to IUCN *Nepenthes khasiana*Hook. f.is a
   a. Critically Endangered
   b. Endangered
   c. Least concern
   d. Vulnerable

7. The scientific name of turmeric is
   a. *Curcuma aromatica*
   b. *Curcuma longa*
   c. *Zingiber officinale*
   d. *Curcuma amada*

8. Which phytogeographical region has the highest diversity of orchids?
   a. Deccan Peninsula
   b. Western Himalayas
   c. Northeast India
   d. Coastal Plains

9. The Northeast region of India is part of which global biodiversity hotspot?
   a. Sundaland
   b. Madagascar
   c. Western Himalayas
   d. Indo-Burma Hotspot

10. The term "biodiversity hotspot" was introduced by
   a. Charles Darwin
   b. Carl Linnaeus
   c. Norman Myers
   d. Ernst Haeckel

-- --- --

(Descriptive)

Time : 1 hrs. 15 min. **Marks : 25**

[Answer question no.1 & any two (2) from the rest]

1. What is Taxonomy? What are the different methods of plant Identification. **1+4 = 5**

2. **Write short notes on any *two* of the following:** **5+5 = 10**
   a. Flora and its types
   b. Invasive plants
   c. Plants as food

3. Discuss Vavilov's theory of centers of origin of cultivated plants, highlighting the major centers and their characteristic crop species. **10**

4. Explain the concept of endemism. Describe the biodiversity hotspots of India **4+6=10**

5. Explain the phytogeographical regions of India. **6+4 = 10**

= = *** = =