

2018

BOTANY

BOT: 403

ANGIOSPERM TAXONOMY – III

Total Marks: 80

Time: 3 Hours

*The figures in the margin indicates full marks for the questions :*

**Q1). Choose the Correct answer for the following Multiple Choice questions** **1×4=4**

(i) Diversity of the habitats over the total land scape or geographical area is called:

- (a) Alpha diversity (c) Beta diversity  
(b) Gemma diversity (d) All of these

(ii) Which is false about Asteraceae?

- (a) Cypsela fruit (c) Syngenesious androecium  
(b) Head inflorescence (d) Hypogynous inflorescence

(iii) Which is wrong about Solanaceae?

- (a) Swollen axile placentation  
(b) Monocarpellary superior ovary  
(c) Bicarpellary superior ovary  
(d) Epipetalous stamen

(iv) The continental drift theory was first proposed by:

- (a) Wegener (1915) (c) Du Toit (1937)  
(b) Willis (1922) (d) Hooker (1817)

**Q2). Answer the very short type questions (Any Six) (2×6=12)**

- a. What is alien species? Give two specific examples.  
b. Write the diagnostic characters of family Lamiaceae.  
c. Mention any two differences between Poaceae and Cyperaceae.

- d. What is virtual herbarium? Mention its significance.
- e. Write the major aim and objectives of phytogeography.
- f. Define vicariance. Give an example.
- g. What is sympatric and allopatric species? Give specific example.

**Q3). Write a short note on *Any five of the following* (5 × 5 = 25)**

- a. IUCN Red list
- b. Continental drift Theory
- c. Salient features of family Poaceae
- d. Indian Centre of Origin
- e. Activities of BSI
- f. Primitive Angiosperms

**Q4). Answer the following questions (*Any three*) (3 × 9=27)**

- a. Briefly discuss the phylogeny and floral evolution of Ranales. (9)
- b. Give a brief account on the different forest types prevailing in Assam. (9)
- c. Define Herbaria. Discuss the role of Herbaria in plant taxonomical study. (2+7=9)
- d. What is phytochoria? Discuss the phytochoria classified by different authors. (1+8=9)

**Q5). Answer the following questions (*Any one*) (1×12=12)**

- a. Write an essay on diagnostic features of family Orchidaceae. Briefly discuss the phylogeny and floral evolution of Orchidaceae. (6+6=12)
- b. Give a general account on different types of Botanical provinces of India. (12)

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