

2016

BOTANY

BOT 403

ANGIOSPERM TAXONOMY – III

Full Marks : 80

Time : 3 Hrs

Figures in the right hand margin indicate full marks for the question

I. Answer the following multiple choice questions 1×4=4

- (i) Match List-I (Plants) with List-II (Family) and select the correct answer using the codes given below the list:

List-I	List-II
A. <i>Mesua ferrae</i>	1. Clusiaceae
B. <i>Panax pseudoginseng</i>	2. Araliaceae
C. <i>Oroxylum indicum</i>	3. Bignoniaceae
D. <i>Zanthoxylum armatum</i>	4. Rutaceae

Codes:

	A	B	C	D
(a)	3	2	3	4
(b)	2	3	3	4
(c)	3	1	4	3
(d)	2	1	3	4

- (ii) A self-supporting community, plants and animals interacting with each other and the non-living environment to provide a balanced system is a__.

(a) Ecosystem (b) Ecotone (c) Energy chain (d) Ecology

- (iii) Species are reproductively isolated when they are
- Interfertile
 - Growing together in a same area
 - Flowering at different time
 - Growing to different height
- (iv) Which of the following category is not considered as a RET criteria
- Area of occurrence in term of geographical distribution
 - Extent of occurrence in term of geographical distribution
 - Area of occurrence in term of population numbers
 - Numbers of population

2. Answer the very short type *Questions* (any Six) $2 \times 6 = 12$
- Differentiate between "Critically endangered" and "Endangered species".
 - Write the binomials of any two plants belong to Acanthaceae.
 - Differentiate between "Dynamic" and "Static" phytogeography
 - What is endemism? What are the factors of endemism?
 - Name any two journals published by BSI.
 - What is alien species? Give examples.
 - Name any two essential oil yielding plants of family Lauraceae.

3. Write a short note on any Five of the following $5 \times 5 = 25$
- Isolating mechanisms
 - Phytochoria
 - Vicariance
 - Botanical province
 - Age and area theory
 - Indian Botanical Garden

4. Answer the following questions (any Three) $3 \times 9 = 27$
- Give an account on the centre of origin of cultivated plants 9
 - Discuss the importance of botanical garden in plant conservation. 9
 - Discuss the characteristic features of early angiosperms 9
 - Give an account on the IUCN RET list categories and criteria 9

6. Answer the following questions (any One) 12
- Briefly discuss about the phylogeny and floral evolution of Magno-Ranales.
 - Briefly discuss about the phylogeny and floral evolution of Orchidales.
