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3554

Your Roll No.

Subsidiary for B.Sc. Honours

IS

BOTANY – Paper II

(Plant Structure)

(NC : Admissions of 2003 and onwards)

Time : 3 hours

Maximum Marks : 50

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

Attempt any five questions.

Answer all parts of a question together.

All questions carry equal marks.

1. (a) Fill in the blanks :

(i) The system of classification proposed by Linnaeus is _____ system.

(ii) Pollination by air is known as _____.

(iii) Parallel venation is present in _____.

(iv) Capitulum inflorescence is found in
_____.

P.T.O.

(v) Double fertilization was discovered by _____ (5×1=5)

(b) Write True or False :

(i) Rhizomes are modified shoots.

(ii) Vascular cambium is an intercalary meristem.

(iii) Polyembryony is the occurrence of more than one embryo in the seed.

(iv) Stomata are meant for aeration.

(v) Flower is a modified shoot, meant essentially for reproduction of the plant. (5×1=5)

2. Differentiate between the following :

(i) Dicot and monocot leaf

(ii) Apocarpy and syncarpy

(iii) Cellular and Helobial endosperm

(iv) Hypogynous and epigynous flower

(v) Vegetative and sexual reproduction

(4×2½=10)

3. Draw well-labelled diagrams only (any four) :

(i) T.S. of mature anther

- (ii) L.S. of anatropous ovule
 - (iii) 8-nucleate embryo sac
 - (iv) T.S. of monocot root
 - (v) L.S. of monocot seed (4×2½=10)
4. Write short notes on any four :
- (i) Verticillaster Inflorescence
 - (ii) Venation
 - (iii) Shoot apex
 - (iv) Xylem tissue
 - (v) Functions of Tapetum (4×2½=10)
5. Give an outline of the Bentham and Hooker's system of classification. Also list its merits and demerits. (10)
6. (a) What is double fertilization? Illustrate with a suitable diagram. Explain its significance. (5)
- (b) Enumerate the differences between monocot and dicot stem with well-labelled diagrams. (5)

7. (a) Discuss the functions of vascular cambium and Cork cambium. (5)

(b) Define :

(i) Ovule

(ii) Annual ring

(iii) Tissue

(iv) Apospory

(v) Placentation (5)