

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2014

(UG-CCSS)

Core Course

Botany

BO 5B 05—ANGIO SPERM MORPHOLOGY,
PLANT ANATOMY REPRODUCTIVE BOTANY AND PALYNOLOGY

(2012 Admissions)

Time : Three Hours

Maximum : 30 Weightage

I. Objective type questions. Answer all *twelve* questions. Multiple choice, fill in the blanks and answer in a single word questions :

1 Pneumatophodes are :

- (a) Pores present in velamen roots. (b) roots of marshy plants.
(c) roots of parasitic plants. (d) Pores present in pneumatophores.

2 Type of fruit in pineapple :

- (a) aggregate. (b) multiple.
(c) pome. (d) pepo.

3 One among the following is not an extra cell wall material :

- (a) suberin. (b) cellulose.
(c) callose. (d) wax.

4 Normal secondary growth is seen in :

- (a) *Dracena*. (b) *Boerhaavia*.
(c) *Eupatorium*. (d) *Bignonia*.

5 Syngamy is _____

6 In monocot leaf stomata are present on _____

7 Phyllode is a _____ modification.

8 In sweet potato _____ type of root modification is seen.

9 Type of fruit in cucumber is _____

10 In bicollateral vascular bundles phloem is seen on

11 Which type of embryosac seen in *Polygonum*.

12 A living mechanical tissue.

(12 x ¼ = 3 weightage)

II. Short answer questions. Answer all *nine* questions :

13 Define Kopper-Kappe theory.

14 What is an endosperm haustoria ?

15 What are leaf traces ?

16 Amphivasal vascular bundles.

17 What are hydathodes ?

18 Write the properties of cell wall.

19 Coenanthium.

20 Imbricate aestivation.

21 Butress roots.

(9 x 1 = 9 weightage)

III. Short essay or paragraph questions. Answer any *five* from seven questions :

22 Write short notes on under ground stem modification.

23 Describe the structure of monocot seed with diagram.

24 Describe the calcium oxalate crystals.

25 Give short notes on secondary tissues.

26 Give an account on periderm formation.

27 Explain helobial type of endosperm.

28 Write short note on polyembryony.

(5 x 2 = 10 weightage)

IV. Essay questions. Answer any *two* from three questions :

29 Describe the development of microsporogenesis the help of suitable diagrams.

30 Explain anomalous secondary thickening in *Bignonia*.

31 Give an account of different types of fruits.

(2 x 4 = 8 weightage)