K20P 0302

Reg. No. : .....

Name : .....

II Semester M.Sc. Degree (CBSS – Reg./Suppl./Imp.) Examination, April 2020
(2014 Admission Onwards)
BOTANY
BOT2C 05 : Embryology, Palynology and Plant Breeding

Time : 3 Hours Max. Marks : 60

I. Answer **any two** of the following. **(2×8=16)**

1) Explain in detail microsporogenesis and pollen development in angiosperms.

OR

2) Explain the classification and practical value of polyembryony.

3) Give an account of centres of origin and diversity of crop plants.

OR

4) Write an account of major crops and their hybrids cultivated in Kerala.

II. Answer **any two** of the following. **(2×6=12)**

5) a) Exine proteins. 1
   b) Evolution of pollen types. 2
   c) Establishment of symmetry in plants. 3

6) a) Define parthenocarpy. 1
   b) Polygonum type of embryosac. 2
   c) Adaptation of pollen grains. 3

7) a) Define Apomixis. 1
   b) Storage metabolites of endosperm. 2
   c) Variety release procedure. 3

P.T.O.

III. Answer **any six** of the following. **(6×3=18)**

8) Process of megasporogenesis.

9) Nutrition of embryosac.

10) Post fertilization changes.

11) Biochemical changes during fruit maturation.

12) Recent advances in palynological studies.

13) Types of germplasm collection.

14) Breeding for disease resistance.

15) What are farmer rights ?

IV. Answer **any seven** of the following. **(7×2=14)**

16) Amoeboid tapetum

17) Filiform apparatus

18) Cleavage polyembryony

19) Pollen recognition

20) Solid style

21) Pollen kitt

22) Helobial endosperm

23) Hybrids

24) NGO's

25) Genetics of resistance.
