



K18P 0095

Reg. No. :

Name :

**Second Semester M.Sc. Degree (Regular/Supplementary/Improvement)
Examination, March 2018
(2014 Admn. Onwards)
BOTANY
BOT2C05 : Embryology, Palynology and Plant Breeding**

Time : 3 Hours

Max. Marks : 60

I. Answer **any two** of the following :

(2×8=16)

1) Give an account of ovule development in Angiosperms.

OR

2) Write on the ultrastructure, physiology and cytology of endosperm.

3) Write on genetic resources. Add a note on their conservation and utilisation in crop improvement.

OR

4) What is mutation breeding ? Explain the major achievements through mutation breeding in different crops.

II. Answer **any two** of the following :

(2×6=12)

5) a) What is tapetum ?

b) Write on male sterility.

c) Pollen embryos and its significance.

6) a) What is tilling ?

b) Write on the genetics of resistance.

c) Variety release procedures.

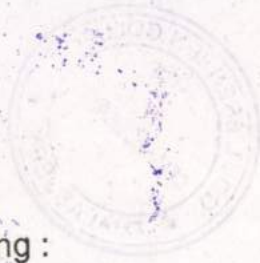
7) a) Types of pollen grains.

b) Adaptation of pollen grains.

c) Nutritive value of honey.

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III. Answer **any six** of the following :

(6×3=18)

- 8) Function of pollen wall layers.
- 9) Double fertilisation.
- 10) Symmetry in plants.
- 11) Terminator seed technology.
- 12) Plant breeders rights.
- 13) Plant breeding institutes in India.
- 14) Farmers movement.
- 15) Types Germ plasm collection.

IV. Answer **any seven** of the following :

(7×2=14)

- 16) Seed certification.
- 17) Pollen allergy.
- 18) Endosperm haustoria.
- 19) Stigma proteins.
- 20) Apomixes.
- 21) Biodiversity international.
- 22) Quarantine.
- 23) Polyembryony.
- 24) Sperm dimorphism.
- 25) Filiform apparatus.