

Roll No.

41212

**B. Sc. (Pass Course) 4th Semester
Examination – May, 2019**

BOTANY - II (PLANT EMBRYOLOGY)

Paper : BOT. 4.2

Time : Three hours] [Maximum Marks : 40
Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*.

- 1. (a) What is Precocious germination of pollen grain ? 1
- (b) Define Palynology. 1
- (c) Define Heterostyly. 1
- (d) What is Herkogamy ? 1
- (e) What is an Ovule ? 1

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- (f) Where in flower ovules are located ? 1
- (g) What is an Albuminous Seed ? 1
- (h) What is Eucarp ? 1

UNIT – I

- 2. Explain that Flower is a modified shoot. 8
- 3. (a) Describe the internal structure of a mature Anther. 6
- (b) Give a diagram showing different layers of Pollen Wall. 2

UNIT – II

- 4. What is Pollination ? Describe their types with importance in Evolution. What promotes Cross Pollination ? 8
- 5. Describe the process of Male Gametophyte development. 8

UNIT – III

- 6. Describe different types of Embryo Sacs. 8

(2)

7. What is double fertilization ? Give its importance.
Answer with relevant diagrams.

UNIT – IV

8. Define a Zygote. How is it converted into Embryo ?
9. What is a Fruit ? Describe its different types.