

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

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.