

PD-381  
(543) M.Sc. BOTANY (THIRD SEMESTER)  
Examination Dec.-2020  
Compulsory/Optional  
Group -  
Paper - II

Name/Title of Paper- PLANT REPRODUCTION  
Time:- Three Hours

Maximum Marks- 080  
Minimum Passing Marks-029

नोट: दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note: Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

**Section-A**

**1. Answer the following questions:** **1x10**

- (a) Name the famous embryologist who advanced the science of embryology in India?
- (b) The Pollen tube enters the ovule through integuments. What can say that Phenomenon?
- (c) What is cleistogamy?
- (d) Which type of flowers having pollen kite?
- (e) What is the meaning of self pollination?
- (f) Which one commonly develops haustoria in embryo sac?
- (g) Give an example of naturally occurring parthenocarpic fruit ?
- (h) Draw L.S. of an epigenous flower?
- (i) Name the plant that having liquid endosperm?
- (j) What is parthenocarpy?

**2. Answer the following short-answer type questions:** **2x5**

- (a) Define ornithophily pollination with suitable example?
- (b) Write role of tapetum?
- (c) Draw the structure of an embryo sac?
- (d) What is double fertilization?
- (e) Define homeotic genes and write their types?

**Section-B**

**Answer the following questions:** **15x4**

- 3. Describe microspore genesis in angiosperm plants.**

Or

Explain sex determination in plants.

- 4. Describe various types of self incompatibility.**

Or

Write short notes on the following:

- (a) Endosperm and its functions      (b) Types of pollinations

- 5. Describe dynamics of fruit growth and its maturation.**

Or

Write short notes on the following:

- (a) Polyembryonic      (b) Apomixes

- 6. What is senescence and how it influence by for more and environmental factors.**

Or

Explain the types of cell death PCD in the life cycle of plants.