

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 famers 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.