

20. (a) Give an account on the heterosis.

Or

(b) Describe the hybrid seed production of rice.

SECTION C — ($3 \times 10 = 30$)

Answer any THREE questions.

21. Briefly account on the seed development.
 22. Elaborate account on the equipment's used for seed processing.
 23. Discuss about the germination requirements in horticulture crops.
 24. Explain about the seed certification.
 25. Describe the salient features of hybrid seeds production in various crops.
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S.No. 6201

P 22 BOE 3 A

(For candidates admitted from 2022–2023 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023

Botany— Elective

SEED TECHNOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (20 marks)

Answer ALL questions

- I. (A) Multiple Choice questions: ($5 \times 1 = 5$)
1. The seed coat is formed from
 - (a) Ovary
 - (b) endosperm
 - (c) carpels
 - (d) integuments
 2. The process of seed drying is very important to maintain its?
 - (a) Oil content
 - (b) Viability
 - (c) Chemical
 - (d) Protein
 3. Grow out test is done for verification of
 - (a) Physical purity
 - (b) Genetic purity
 - (c) Germination
 - (d) None

4. Tetrazolium test determine the level of activities of enzymes.

- (a) ATPase (b) Dehydrogenase
(c) Isomerase (d) Carboxylase

5. Indian cotton is

- (a) G.herbaceum (b) G.barbadense
(c) G.hirsutum (d) G.arboreum

(B) Fill in the blanks : (5 × 1 = 5)

6. The primary endosperm nucleus is _____

7. The white edible part of maize is _____

8. Germination is inhibited by _____

9. _____ equipment used to apply chemical materials in water.

10. Development of embryo without fertilization is known as _____

II. Write short note about the following topics:
(5 × 2 = 10)

11. Embryogenesis.

12. Seed treatment

13. Seed vigour

14. Moisture test

15. Cotton crop

SECTION B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b)

16. (a) Explain about the endosperm.

Or

(b) Discuss about the economic importance of seeds.

17. (a) Briefly account on the physical treatments of seeds.

Or

(b) Discuss about the seed storage.

18. (a) Write a note on seed germination.

Or

(b) Describe the concept of seed vigour.

19. (a) Explain about the seed certification.

Or

(b) Discuss the quality control for import and export of seeds.