

**B.Sc. (Part-II) Semester-IV Examination**

**SEED TECHNOLOGY**

**(Seed Testing and Seed Quality Control)**

Time : Three Hours]

[Maximum Marks : 80

**Note :—** (1) There are **seven** questions in all.

(2) Question No. **1** is compulsory and carries **8** marks.

(3) Question Nos. **2 to 7** carry equal marks.

(4) Draw well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :

(i) The certifying authority is entitled to full information about the techniques used by the \_\_\_\_\_ to develop and maintain the variety.  $\frac{1}{2}$

(ii) Field \_\_\_\_\_ are perform by certification on officials on all fields for which applications are submitted.  $\frac{1}{2}$

(iii) Seed certifying agency should be \_\_\_\_\_ of regulatory work.  $\frac{1}{2}$

(iv) In accordance with the ISTA rules a minimum number of \_\_\_\_\_ seeds is required for germination test.  $\frac{1}{2}$

(B) Choose the correct alternatives (MCQ) :

(v) \_\_\_\_\_ seed crops are inspected for isolation from other fields that represent potential for outcrossing.  $\frac{1}{2}$

(a) Self pollinated (b) Cross pollinated

(c) Neutral (d) None

(vi) The Indian Seed Act was passed by Parliament in \_\_\_\_\_.  $\frac{1}{2}$

(a) 1970 (b) 1950

(c) 1966 (d) 1981

(vii) \_\_\_\_\_ method is suitable for all kinds of seeds.  $\frac{1}{2}$

(a) Random cup method (b) Spoon

(c) Mechanical divider (d) Field

(viii) Central Seed Laboratory is situated at :  $\frac{1}{2}$

(a) New Delhi (b) Kolkata

(c) Nagpur (d) Madras

(C) Write in **one** sentence :

(ix) What is meant by AOSCA ? 1

(x) What is the purpose of seed certification ? 1

(xi) Which seed certification board is to deal with all problems related to seed certification ? 1

(xii) Why field inspection is needed ? 1



2.	Comment on :	www.FirstRanker.com	www.FirstRanker.com
	(a) History of seed testing.		4
	(b) Heterogeneity test.		4
	(c) Seedling evaluation.		4
	<b>OR</b>		
	(d) Seed testing equipments.		4
	(e) Physical purity analysis.		4
	(f) Moisture and germination testing.		4
3.	Comment on :		
	(a) Seed vigour testing.		4
	(b) Storage of guard samples.		4
	(c) Rapid test.		4
	<b>OR</b>		
	(d) Culture purity testing.		4
	(e) Record keeping and reporting of results.		4
	(f) Testing of plated seeds.		4
4.	Give detail account of seed quality control systems.		12
	<b>OR</b>		
	Define seed quality and explain in detail physical purity and genetic purity concepts.		12
5.	Define seed certification. Explain in detail classes of certified seeds.		12
	<b>OR</b>		
	Describe in detail :		
	(a) Phases of seed certification.		6
	(b) Standards of seed certification.		6
6.	Comment on :		
	(a) Sampling of seed quality.		4
	(b) New Seed Policy (1988).		4
	(c) Testing of genetic purity.		4
	<b>OR</b>		
	(d) Technique of field inspection of seed production.		4
	(e) Inspection at harvesting.		4
	(f) Interstate seed certification.		4
7.	Comment on:		
	(a) Function of Central Seed Committee.		4
	(b) OECD.		4
	(c) Future trends in seed certification.		4
	<b>OR</b>		
	(d) Plant Breeders Right.		4
	(e) Seed Certification Scheme.		4
	(f) Central Seed Certification Board.		4