

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 performed by certification 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
	OR		
(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
	OR		
(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
	OR		
	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
	OR		
	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
	OR		
(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
	OR		
(d)	Plant Breeders Right.		4
(e)	Seed Certification Scheme.		4
(f)	Central Seed Certification Board.		4