

B.Sc. (Part—II) Semester—IV Examination
SEED TECHNOLOGY
(Vocational)
(Seed Testing and Seed Quality Control)

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory.

(2) Draw well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :—

(i) Seed certification agency should be _____ work. $\frac{1}{2}$ (ii) Germination is the emergence and development of a seedling from the seed _____. $\frac{1}{2}$ (iii) Sampling of seed lots from bins is done by _____. $\frac{1}{2}$ (iv) Field inspection meant to verify those factors which can cause irreversible damage to the _____ purity of seed. $\frac{1}{2}$

(B) Choose the appropriate alternative :—

(i) The principle object of a seed vigour test is to differentiate a range of _____ level. $\frac{1}{2}$

(a) Quantity

(b) Quality

(c) Both of them

(d) None from these

(ii) Central seed testing laboratory is situated at _____. $\frac{1}{2}$

(a) New Delhi

(b) Nagpur

(c) Madras

(d) Kolkata

(iii) Which class of certified seed maintain satisfactory genetic purity of variety. $\frac{1}{2}$

(a) Breeder seed

(b) Foundation seed

(c) Registered seed

(d) None

(iv) _____ method is suitable for all kinds of seed. $\frac{1}{2}$

(a) Mechanical divider

(b) Random cup method

(c) Spoon method

(d) None

- (C) Answer in **ONE** sentence :—
- (i) What is meant by Seed Act ? 1
 - (ii) Which seed samples are drawn and submitted by a seed law enforcement officer ? 1
 - (iii) What is meant by NBPGR ? 1
 - (iv) Give the right of farmer. 1
2. Explain in brief :
- (a) Equipments and maintenance of seed testing. 4
 - (b) Seed testing linkages. 4
 - (c) Role of Inter-National Organizations in seed testing. 4
- OR**
- (d) Seed Sampling and Dividing. 4
 - (e) Handling and testing of the sample. 4
 - (f) Requirements of Seedling evaluation. 4
3. Discuss in detail various processes involved in Seed Testing and mention precautions during Seed Testing. 12
- OR**
- Discuss Seed Act in relation to Seed Testing and mention its marketing process. 12
4. Describe in brief —
- (g) Seed Legislation. 4
 - (h) Qualification of Seed Inspector. 4
 - (i) Genetic purity of Seeds. 4
- OR**
- (j) Physical purity of Seeds. 4
 - (k) Duties of Seed Inspector. 4
 - (l) Seed Quality Control Systems. 4
5. Explain in brief
- (m) Stages in Seed Certification. 4
 - (n) Land requirements and isolation distance. 4
 - (o) Agencies of Seed Certification. 4

- (p) Techniques of Field Inspection. 4
- (q) History of Seed Certification. 4
- (r) Seed Certification Standards. 4
6. Discuss in brief :—
- (a) Techniques of field inspection of Seed Production. 6
- (b) New Seed Policy 1988. 6
- OR**
- (p) Sampling for Seed Quality evaluation. 6
- (q) Revalidation of Seed lots. 6
7. Explain in brief :—
- (s) Future trends in Seed Certification. 4
- (t) Plant Breeders Right. 4
- (u) State Seed Committee. 4
- OR**
- (v) Central Sub-committee on Crop Standard. 4
- (w) Organization of Economic Cooperation and Development [OECD]. 4
- (x) Seed Certification Schemes. 4

