

B.Sc. (Part—III) Semester—V Examination
SEED TECHNOLOGY
(Seed Pathology and Seed Entomology)

Time : Three Hours]

[Maximum Marks : 80

- N.B. :—** (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 neat and well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :

- (i) Plant _____ is the scientific study of diseases in plants caused by pathogens. $\frac{1}{2}$
(ii) _____ are the best pollinators in a building state during the bloom period of the crop. $\frac{1}{2}$
(iii) Seed transmitted fungi are those that cause no infection to seed itself but infect _____ in the field. $\frac{1}{2}$
(iv) _____ is a procedure by which it can be determined whether the seed is healthy or diseased. $\frac{1}{2}$

(B) Choose correct alternative :

- (v) What is meant by CSL ?
(a) Central Success Laboratory (b) Central Scientific Laboratory
(c) Central Seed Laboratory (d) Central Science Laboratory $\frac{1}{2}$
- (vi) Seed Act to provide for regulating the quality of seeds for sale was established in :
(a) 1950 (b) 1966
(c) 1970 (d) 1961 $\frac{1}{2}$
- (vii) When growth and development of plant are delayed due to unfavourable weather, the virus infections in seed is :
(a) Neutral (b) Decreased
(c) Increased (d) None of these $\frac{1}{2}$
- (viii) The pollination takes place by insects :
(a) Hydrophily (b) Anemophily
(c) Entomophily (d) Chirapterophily $\frac{1}{2}$

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

- (ix) Storage fungi 1
(x) Seed certification 1
(xi) Pollinators 1
(xii) Insecticides 1

2. Describe :
- (a) Seed infection 4
 - (b) Impact of storage fungi on human health 4
 - (c) General account of seed borne viruses. 4
- OR**
- (d) Storage fungi 4
 - (e) Impact of storage fungi on animal health 4
 - (f) Economic significance of seed born diseases. 4
3. Write short notes on :
- (g) Quarantines of seed health testings 6
 - (h) Procedure of seed treatment 6
- OR**
- Give detailed account of equipments used in seed treatment. 12
4. Comment on :
- (i) Seed certification 4
 - (j) International cooperation in seed pathology 4
 - (k) Seed Act of seed borne diseases. 4
- OR**
- (l) Post seedling stage inspection 4
 - (m) Tolerance limit of seed borne pathogens 4
 - (n) National cooperation in seed pathology. 4
5. Write short notes on :
- (o) Insects body and appendages 6
 - (p) Insects pests and their management. 6
- OR**
- (q) Economic importance according to orders of insects. 6
 - (r) Vegetables and dry fruits. 6
6. Comment on :
- (s) Preparation of spray solution 4
 - (t) Methods of insect control 4
 - (u) Uses of insect pollinators in crop pollination. 4
- OR**
- (v) Social structure of honey bees 4
 - (w) Pre-harvest sanitation spray in insect control 4
 - (x) Role of beneficial insects in seed production. 4
7. Describe :
- (a) Fumigants 4
 - (b) Plant protection equipments 4
 - (c) Rodents and their control. 4
- OR**
- (d) Impact of seed protectants on seed viability 4
 - (e) Detection of infestation 4
 - (f) Types of seed equipments. 4