

Roll No. : (in figure) _____ (in words) _____

Student Index No. _____ Regn. No. _____ of _____

Time : 2 Hours

Full marks : 40

Questions are of value as indicated in the margin

Part - I

(Objective and Short Answer Type)

(Use only ball point pen)

Time : 20 minutes

Full marks : 10

- Note:** 1. Answer in question paper itself.
2. Striking, rewriting or overwriting are not allowed in the objective type questions.

1. Fill in the blanks with suitable word(s): (any ten)

0.5×10=5

- (i) Seed viability is tested in laboratory by _____ test.
- (ii) _____ isolation distance requires for the certified seed production of high yielding varieties of rice.
- (iii) _____ coloured tag is used on foundation seed packet.
- (iv) The germination percentage of certified seeds of rice is _____.
- (v) Cotton is a/an _____ pollinated crop in terms of the nature of its pollination.
- (vi) Rice seed should not be stored above _____% moisture content to avoid damage in storage.
- (vii) The germination percentage of nucleus seed should be _____%.
- (viii) The style length of brinjal is most preferable for pollination _____.
- (ix) ISTA stands for _____.
- (x) The full form of SSCA is _____.
- (xi) Isolation distance required for foundation and certification of bhindi is _____.
- (xii) The two lines required for F1 hybrid rice seed production are _____ line and _____ line.
- (xiii) The oxidation of _____ compound in presence of dehydrogenase enzyme converts colourless 2, 3, 5 triphenyl tetrazolium chloride to red coloured fomazan.

2. What are the following? (any five)

1×5=5

(a) Breeder seed

(b) PPVFRA

(2)

(c) Synthetics

(d) Inspection during seed certification

(e) Isolation distance

(f) Pure live seed

(g) Inter and Intraspecific crosses

(h) Seed vigour

(i) CMS line

B.Sc. (Ag.) Honours Semester-VI Examination, 2019
Course No: SST-321 (Principles of Seed Technology)

Part - II
(Descriptive Type)

Time : 100 minutes

Full marks : 30

Questions are of value as indicated in the margin

Answer *any four* questions

3. Write short notes on *any five (5)* of the following: 1.5×5=7.5
- (a) Grow out test
 - (b) Selection of seed for breeder seed production
 - (c) Hand pollination
 - (d) Methods of seed drying
 - (e) Types of seed dryers for heated air drying
 - (f) Working principle of air screen machine
 - (g) Seed priming
 - (h) Composite variety
 - (i) Three way cross
4. Differentiate among *any three (3)* of the following: 2.5×3=7.5
- (a) Nucleus seed and breeder seed
 - (b) Seed viability and seed vigour
 - (c) Isolation distances for sunflower and HYV rice seed production
 - (d) Truthfully labelled seed and certified seed
 - (e) B (maintainer) line and R (restorer) line
 - (f) Self-pollination and cross pollination
5. Write down the benefits of seed treatment. What are the different types of seed treatments? 5+2.5=7.5
6. What are the possible reasons of deterioration of crop varieties? 7.5
7. What do you mean by good quality seed? What are the characters of good quality seed? Discuss about different classes of seed. 1+2.5+4=7.5
8. What is seed certification? Write in brief the procedure of certified seed production of hybrid maize crop you have studied. 1+6.5=7.5
9. Write down the seed production techniques of brinjal, tomato, bhindi and chilli. 7.5
-