

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE
B.Sc.(Hons.) Summer-2021 - 22 Examination

Semester: 4

Subject Code: 20102252

Subject Name: Principle of seed technology

Date:12/03/2022

Time:10:30am to 1:00pm

Total Marks: 50

Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.**A. Fill in the blanks. (Each of 0.5 marks)****(05)**

1. Isolation distance for foundation seed in hybrid sorghum is -----
2. Physical purity of pearl millet certified seed is -----
3. PPVFR stands for-----
4. Only-----variety is allowed for seed certification..
5. Seed standards of moisture % in maize is-----.
6. Certified seed is the progeny of -----.
7. Ability to germinate into normal seedling is called as -----.
8. R line is called as ----- .
9. Synchronization of male and female parent is called as-----.
10. Germination % of certified seed in wheat is-----.

B. Multiple choice type questions. (Each of 0.5 mark)**(10)**

1. Certification is required for

a) Certified seed	c) Nucleus seed
b) Breeder seed	d) All the above
2. Improved seed includes

a) Foundation seed	c) Breeder seed
b) Certified seed	d) All the above
3. In hybrid pigeon pea, isolation distance for foundation seed is

a) 50 meter	c) 5meter
b) 100 meter	d) 200 meter
4. Central Seed Committee is located at

a) New Delhi	c) Banglore
b) Mumbai	d) Hydrabad
5. Amongst the following which is the Sorghum Hybrid

a) Ganga-1	c) CSH-1
b) APRH -1	d) HB-1
6. Germination percentage for rice in certified seed production is

a) 80%	c) 85%
b) 90%	d) 75%
7. Off type for foundation seed in brinjal is

a) 0.1%	c) 0.2%
b) 0.05%	d) 1%
8. Minimum number of inspections required in double cross hybrid seed production of pearl millet

a) 3	c) 4
b) 2	d) 5
9. Time isolation is allowed in

a) Maize	c) Paddy
b) Soybean	d) Sorghum
10. Isolation distance required for certified seed production in hybrid rice

a) 30meter	c) 100 meter
b) 200meter	d) 400 meter
11. Progeny of foundation seed is called as

a) Nucleus seed	b) Foundation seed
c) Registerd seed	d) Certified seed

12. ISTA stands for
 a) Indian standard time agency
 c) International seed testing association
 b) Indian seed testing agency
 d) None of above
13. Physical purity required in chick pea variety
 a) 98%
 c) 95%
 b) 100%
 d) 90%
14. Nucleus seed production is carried out by
 a) Farmer
 c) Certification Agency
 b) NSC
 d) Breeder
15. Label colour for foundation seed is
 a) Golden yellow
 c) Blue
 b) White
 d) Red
16. Example of seed infection is
 a) Loose smut
 c) Powdery mildew
 b) Cover smut
 d) All the above
17. Seed drying is important to maintain its
 a) Genetic purity
 c) Seed viability and vigour
 b) Physical purity
 d) None of the above
18. GOT is done to verify
 a) Physical purity
 c) Germination
 b) Genetic purity
 d) Moisture
19. Certified seed of Maize should have minimum germination
 a) 70%
 c) 60%
 b) 80%
 d) 90%
20. A line is called as
 a) Male sterile line
 c) Maintainer line
 b) Restorer line
 d) None of the above

Q.2 Do as Directed.

A. Define the following. (Any five)

(05)

1. Seed Inspection
2. Genetic purity
3. Isolation distance
4. Seed Treatment
5. Single cross
6. Seed Technology
7. Seed

B. Answer the following. (Any Five)

(05)

1. Write the formula for Real value of seed
2. Write in which crop time isolation is allowed.
3. Write types of seed processing.
4. Write objective of seed technology
5. Write classes of seed
6. In which year Seed Act came into operation through the country in India.
7. What is seed marketing.

Q.3 Write short notes. (Any five)

(10)

1. Seed drying.
2. Procedure of seed production in wheat variety.
3. Requirement of seed marketing.
4. Duties of seed certification officer
5. Maintenance and production of nucleus seed in self pollinated crop.
6. Characters of good quality seed

Q.4 Attempt any Three/Long Questions/Example

(15)

1. Seed certification process
2. Machinery and building required in seed processing
3. Write factors affecting seed marketing
4. Write procedure of hybrid seed production in paddy.