

QUESTION BANK

FILL IN THE BLANKS

1. Seed deterioration starts right after the stage of
2. The genetic purity of foundation seed is%.
3. The objectionable weed of rapeseed and mustard is.....
4. Seeds with moisture content greater than% should be dried to below this value before fumigation.
5. The class of seed is regarded as not a recognized seed class in India.
6. ISTA is abbreviated as
7. In case of physical quality, there should be maximum% of OCS, WS and IM combined.
8. In case of breeder seed the minimum genetic purity should be maintained with%
9. According to the expert group on seeds, the targeted seed replacement rate in case of hybrids is %
10. Name any method for the enhancement of natural out crossing rate in Rice seed production.
11. The required Seed rate in case of tomato seed production is
12. Riddled seeds are found by the attack ofinsect.
13. SCST is abbreviated as..... in seed testing process.
14. Loose smut istype of seed borne disease.
15. Cloth bag, Gunny bag are the example oftype of storage container.
16. The method for the detection of GM crops isor.....
17. The father of hybrid rice seed production in world is
18. Name any insect that act as a storage grain pest
19. Seed with moisture content greater than% should be dried below this, before fumigation.
20. Theinstrument is used for the diagnosis of seeds of other variety.
21. The crop with having higher percentage of germination is
22. The most common desiccant in the storage house is
23. The Father of Hybrid rice in India is
24. Tz test was given by
25. Tz test mainly used for the detection of seed
26. Peroxidase test is mainly done incrop
27. NaOH test is used for testing the purity incrop
28. Seed is an mature ripened
29. The most potent experimental method to test the genetic purity is.....
30. The tag color of certified seed is.....
31. The tag color of breeder seed is.....
32. The tag color of foundation seed is.....

33. The tag color of nucleus seed is.....
 34. The tag color of registered seed is.....
 35. The tag color of truthfully labelled seed is.....

MATCH THE FOLLOWING:

COLUMN A

1. Tz test
2. GM crop
3. Grow out test
4. Fumigation
5. Promotional Media

COLUMN B

- A. Seed processing
- B. Genetic purity
- C. Seed marketing
- D. Bt -Brinjal
- E. Seed storage
- F. Seed viability

CLASSES OF SEED

1. Nucleus Seed
2. Breeder Seed
3. Foundation Seed
4. Certified Seed
5. Truthfully Labelled Seed

TAG COLOUR

- A. Golden Yellow
- B. White
- C. Purple
- D. No colour
- E. Azure Blue
- F. Green colour

CROP	SEED MULTIPLICATION RATIO
1.GROUNDNUT	A.1:20
2.WHEAT	B.1:450
3.POTATO	C.1:100
4.BHINDI	D.1:4
5.BRINJAL	E.1:8

CROP	OBJECTIONABLE WEED
1.WHEAT	A. <i>Eichnochloa crusgali</i>
2.BARSEEM	B. <i>Covolvulus arvensis</i>
3.RICE	C. <i>Argemone mexicana</i>
4.RAPESEED AND MUSTARD	D. <i>Chicory</i>
5.OATS	E. <i>Wild oat</i>

SHORT QUESTIONS

1. Write the goal of Seed Technology.
2. Differentiate between seed and grain
3. What are the different components that affect Seed Quality?
4. What are the principles of Seed storage?
5. What are the factors that affect Seed Deterioration?
6. Write about the Duty and Power of seed inspector.
7. Discuss about the features of Seed Act(1966)
8. Write the difference between Physical and Mechanical drying
9. Briefly explain about Grow out test
10. Discuss about the Market structure in Seed Marketing
11. Define Seed Technology
12. Define Objectionable weed
13. Define the term Rouging
14. Define Isolation Distance
15. State Harrington Rule
16. Define Orthodox seed
17. Define Provenance Effect
18. Define Maintainer Line
19. Define Macrobiotic Seed
20. Define Relative Mobility on Electrophoresis
21. Define GM crops
22. Define Equilibrium Moisture Content

23. Define ELISA method
24. Define PCR method
25. What do you mean by Pollen shedder

LONG QUESTIONS

- Q. Define precisely about different classes of seed in India
- Q. Explain in details about the factors affecting seed storage.
- Q. Describe the package of practices on Time of sowing, Isolation Distance, Fertilizer requirement, Irrigation and Harvesting in wheat seed production.
- Q. Discuss in details about the factors affecting during seed storage
- Q. Discuss in details about the factor affecting seed deterioration.
- Q. Describe precisely and briefly about the procedure of seed certification in India.

OBJECTIVE QUESTIONS

1. TZ test is done for
a. Viability b. Genetic purity c. Germination d. Health test
Ans. Viability
2. Seed rule came into force in
a. 1968 b. 1969 c. 1966 d. 1963
Ans. 1969
3. Who has given Thumb rule in case of seed storage conditions
a. Robert b. Harrington c. R.N. Basu d. Avert
Ans. Harrington
4. Submitted sample is obtained from
a. Primary sample b. Composite sample c. Working sample d. None of these

Ans. Composite sample

5. Number of field inspection to be taken for Sorghum

a. 1 b. 2 c. 3 d. 4

Ans. 3

6. Groundnut multiplication ratio is

a. 1:8 b. 1:16 c. 1:10 d. 1:40

Ans. 1:8

7. Who certifies the breeder seed

a. Breeder b. Seed certifying agency c. Seed analyst d. None

Ans. Breeder

8. The 1st offence for violation of Seed Act is a fine of

a. 500 Rs. b. 5000 Rs. c. 1000 Rs. d. 2000 Rs.

Ans. 500 Rs.

9. Seed Act was enforced in

a. 1966 b. 1969 c. 1964 d. 1970

Ans. 1969

10. Isolation distance for wheat is

a. 3m b. 1m c. 6m d. 100m

Ans. 3m

11. Seed Multiplication ratio for wheat is

a. 1:20 b. 1:80 c. 1:10 d. 1:100

Ans. 1:20

12. ISTA is located at

a. Geneva b. Paris c. USA d. Switzerland

Ans. Switzerland

13. In tomato, the minimum field visits and isolation distances for certified seed production is

a. 2 b. 3 c. 4 d. 1

Ans. 4

14. The most potent field experimental method to test the genetic purity of seed sample is

a. Tz test b. Grow-out test c. Brick gravel test d. Blotting paper test

15. Seed is an mature ripened

a. embryo b. ovary c. stigmatic region d. ovule

16.. In gel electrophoresis the rate of mobility of the protein during varietal identification is depends on (q = charge, m = mass & t = time)

a. m/q b. t/q c. q/m d. q/t

17. The objectionable weed of rapeseed and mustard is
a. chicory b. *C.arvensis* c. *A.sativa* d. *A.mexicana*

18. Who is considered as father of Hybrid rice in India
a. M.S.Swaminathan b. E.J.Butler c. E.A.Siddique d. Y.L.Nene

19. Seed with moisture content greater than how much percentage should be dried below this, before fumigation

a. 20% b. 14% c. 35% d. 10%

20. The enzyme associated with tetrazolium testing
a. Catalase b. Citric oxide 205 c. dehydrogenase d. amylase

21. The type of germination in onion is

a. Hypogeal
b. Epigeal
c. Semi-hypogeal
d. None of these

22. In India seed certification is

a. compulsory
b. Voluntary
c. Tentative
d. Salutary

23. Labelling of seed packages under seed Act is

a. Voluntary
b. Compulsory
c. Need based
d. None

24. Minimum weight of submitted sample for Genetic purity test of Jute is

a. 100 g b. 200g c. 250g d. 150 g
Ans. 250 g

25. What is the Row- ratio of B-line and A-line for CMS multiplication.

a. 2:8 b. 2:8 c. 4:10 d. 8:2
Ans. 2:8

26. Gamet divider works on which force

a. Centrifugal force b. Gravitational force c. Frictional Force d. Magnetic Force
Ans. Centrifugal force

27. The sample sent for analysis by certification agencies is called

a. Official sample b. Certified sample c. Service sample d. None of these
Ans. Certified sample

28. who is regarded as father of Hybrid rice in world

a. Ingo potrykus b. E.M.Smith c. Prof Y.L.Ping d. E.A.Siddique
Ans. Y L Ping

29. National seed corporation started in which year

a. 1967 b. 1969 c. 1968 d. 1963
Ans. 1963

30. For estimation of moisture content the seeds are packed in containers which are

- a. Moisture pervious
- b. Moisture resistant
- c. Moisture impervious
- d. Moisture vapour proof

31. Which of the foolowing is not a promotional media in case of seed marketing?

a. Article b. Newspaper c. Radio d.Kisan mela

32. Which one of the following is not a channel for seed distribution for seed marketing in India.

a. farmer to farmer b.Disribution by cooperatives c. Distribution by central marketing cell
d. Distribution by Govt of India

33. Which one is not true for organic seed production.

a. Improves soil fertility b. use of synthetic pesticides and fertilizers c. enhance beneficial insects
d. all of the above

34. Which one of the organo-mercurial compound used in seed treatment.

a.PMA b. Thiram c. Metalaxyl d. cuprous oxide

35.The eradication of fungal spores present inside the seed coat is called as

a. seed disinfestation b. seed disinfection c. seed protection d. seed eradication

36. In seed certification process the certificate issued is valid for how many months from the date of testing is

a. 12 months b. 5 months c. 9 months d. 2 months

37. The person who violates the seed act and intervene seed inspector for his rightful exercise will be charge a fine of rupees for 2nd offensive act is

- a. Rs.1500
- b. Rs. 2000
- c. Rs. 1000
- d. Rs. 500

38. What is the temperature programmed in PCR at Denaturation phase is

- a. 72⁰ C
- b. 85⁰ C
- c. 54⁰ C
- d. 92⁰ C

39. The peculiar method that used to detect GMO crops by antigen-antibody interaction is

- a. PCR method
- b. fluorescent technique
- c. ELISA method
- d. Gel electrophoresis

40. The most efficient detection method of GMO crops is

- a. ELISA method
- b. PCR method
- c. fluorescent technique
- d. Hybridoma technique

