

**DEPARTMENT OF AGRICULTURAL AND FOOD ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
KHARAGPUR**

Final Examination (Spring Semester)

Date: 28.4.2010 Time: 2-00 pm- 5-00 pm (3 hours) Full Marks: 50 No of students: 09
Subject No. AG60094 Subject Name: Seed Technology Course: 1st Year M. Tech. (ASM, AB & DFE)

NOTE: Questions 1-10 carry one mark each; Questions 11-20 carry two marks each and the rest Questions carry four marks each

Attempt All Questions

- 1) Write down the names and full addresses of two societies or Associations of seed technology
- 2) Differentiate between a grain and a seed
- 3) What should be the staffing of a seed testing lab handling 3000 samples per year?
- 4) What is the use of FeCl₃ or TZ in seed industry?
- 5) What are the factors affecting seed packaging?
- 6) Give an out line of organizational set up of seed program
- 7) What is seed processing? Narrate its objectives
- 8) Put down the reasons why and when embryo excision method becomes essential for seed testing?
- 9) What are the salient features of The Seed Act, 1966?
- 10) Why high SRR is considered important for a country like India?
- 11) Write mode of action of any insecticide or fungicide or rodenticide used for protecting the seeds during storage
- 12) Discuss: Seed Technology is an amalgamated subject
- 13) What are the duties and responsibilities or powers of seed inspectors?
- 14) Differentiate between the cultivation practices used for seed production and agronomic crop production
- 15) What are the statutory requirements for labelling or sale of seeds?
- 16) How bio-assay is relevant to seed testing?
- 17) Name the major steps of genetic principles of seed production or write down the objectives of the ISTA
- 18) Discuss the factors affecting the longevity of stored seeds
- 19) Briefly narrate the special treatments used for breaking seed dormancy
- 20) Write a short note on the use of psychometric chart for seed drying
- 21) Give a brief account of Indian Seed Industry
- 22) How will you produce good quality paddy seeds?
- 23) What do you know about Seed Certification?
- 24) How will you conduct Seed purity test and why?
- 25) Explain the following paragraph and point out the escape routes frequently resorted to by the offenders prosecuted under the Seed Act, 1966 and the Rules framed thereunder:
“Enforcing agency for Seed Act:..... Seed Inspectors with prescribed qualifications, appointed by the state Government through notification in the official Gazette are responsible for seed law enforcement in their respective areas.....”