



B.E. / B.Tech. (Full Time) END SEMESTER EXAMINATIONS, NOV / DEC 2011

AGRICULTURAL AND IRRIGATION ENGINEERING BRANCH

SIXTH SEMESTER – (REGULATIONS 2008)

AI 9028 SEED TECHNOLOGY APPLICATIONS

Time: 3 hrs

Max Marks: 100

Answer ALL Questions

Part – A (10 x 2 = 20 Marks)

- 1) Differentiate *seed* and *grain*.
- 2) How is the *planting value* determined?
- 3) What are the mechanisms that encourage cross pollination in bisexual flowers?
- 4) Differentiate seed *vigour* and *viability*.
- 5) List the factors to be considered in planning a layout for seed processing plant.
- 6) What is *stratification*?
- 7) What are *breeder seeds*?
- 8) Define *seed marketing*. How can it be successful?
- 9) What do you understand by *quarantine of seeds*?
- 10) What are the packaging materials used for short term and long term storage of seeds?

Part – B (5 x 16 = 80 Marks)

- 11) i) Discuss the seed quality characteristics. (6)
ii) How do you relate seed technology to other sciences? (6)
iii) List the significant achievements of National Seeds Corporation. (4)
- 12) a) i) Describe the process of hybrid seed production in tomato. (6)
ii) Discuss the importance of harvesting of seed crops, drying and storage of seeds. (10)

(or)

- b) i) Describe the various types of male sterility used to make hybrid seed production easier and economical. Also describe the process of hybrid seed production in tomato. (6)
- ii) Compare the floral biology of papaya and cucurbits. Discuss the practices recommended for producing papaya seeds. (6)
- iii) How are the seeds of brinjal and okra extracted? (4)
- 13) a) i) Explain in detail the process of seed certification done under the provision of Seed Act 1966 and Seed Rules 1968. (10)
- ii) Discuss the factors affecting seed longevity in storage. (6)
- (or)
- b) i) What are the advantages of drying seeds? Explain the Forced Air Drying method in detail. (10)
- ii) Write a brief note on
 a) Germination test b) Seed Viability Nomograph c) Universal Moisturemeter (6)
- 14) a) i) Draw the skeleton of staffing pattern of a seed certification agency and explain their role. (8)
- ii) Discuss all the aspects connected to field inspection in seed certification process. (8)
- (or)
- b) i) State all the steps to be followed in the planning and development of a new seed programme. (8)
- ii) What are the seed legislations brought out in 1983 and 1988? Briefly discuss their objectives. (8)
- 15) a) i) What is *seed tag*? Discuss the details to be reviewed in it. (8)
- ii) Discuss the *marketing mix* in detail. (8)
- (or)
- b) i) Contrast public and private seed organisations on all aspects. (8)
- ii) Explain how the profit – loss account is prepared for a seed product. (4)
- iii) Discuss the techniques used for seed pricing. (4)