

M. Sc. (Ag) Semester-III Examination 2016

Agronomy

Course: AGR 508

(Agronomy of Pulse Crops)

Time: 3 hours

Full Marks: 50

Questions are of values as indicated in the margin.

Answer any five questions including Question No. 1 which is compulsory.

1. Write short notes on following (*any five*): 2×5 = 10
 - a) Classification of gram
 - b) Seed treatment of pulses with bio-fertilizers
 - c) Biological nitrogen fixation through cultivation of pulses
 - d) Utera cropping in lathyrus
 - e) Role of micro-nutrients in pulse cultivation
 - f) Causes of flower and fruit drop of pulse crops
 - g) Differentiate between field pea and garden pea
 - h) Leghaemoglobin
 2. a) What is the present status of pulse production in India with special reference to West Bengal?
b) Mention the constraints of pulse production in the country. Suggest the strategies for pulse production under drought, waterlogged and salinity conditions. 4+6=10
 3. a) Discuss about the soil and climate, sowing variables, variety, nutrient and water management and yield of lentil under West Bengal condition.
b) Write down the desirable characteristics of pulse varieties suitable for intercropping. 7+3=10
 4. Describe the production technology of mung bean with reference to sowing time, seed rate, spacing, variety, fertilizer requirement, weed management and water management. 10
 5. a) Mention the selection criteria of rhizobial strains.
b) Write in details about advanced production technology of pigeonpea with special emphasis on seed and sowing, manuring, water and weed management. 2+8=10
 6. Describe the agro-techniques of chickpea with reference to area of cultivation, soil and climate, sowing variables, nutrient, weed and water management. 10
 7. a) What problem is associated with consumption of lathyrus as pulse and how can we overcome it?
b) Describe about the agronomic practices adopted in cowpea cultivation in India. 3+7=10
 8. a) Discuss briefly about the cultivation practices of field pea with special reference to adaptation, sowing variables, varieties, harvesting and yield.
b) How can you cultivate urdbean in eastern India? 6+4=10
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