

Roll No.....

Total No. of Printed Pages: [01]

Total No. of Questions: [09]

B. Sc. Agriculture (Semester – 1st)
WATER MANAGEMENT AND MICRO IRRIGATION

Subject Code: BAGR1-104

Paper ID: [130107]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

- Q1. Attempt the following:
- a. Effective rainfall.
 - b. Surface irrigation
 - c. Objectives of irrigation.
 - d. Surface drainage
 - e. Mulching.
 - f. Hydrological cycle.
 - g. Importance of irrigation.
 - h. Advantages of Drip irrigation.
 - i. Water use efficiency
 - j. Permanent wilting point

Section – B

(5 marks each)

- Q2. Explain critical stages for water need of crops?
- Q3. Discuss the role of plastic mulching used in crop production?
- Q4. Describe conjunctive use of water? Explain harmful effects of excess irrigation?
- Q5. Discuss the Criteria of Scheduling Irrigation? Discuss about Irrigation Efficiency Measures?
- Q6. Define Drainage, its principle and discuss its types along with advantages?

Section – C

(10 marks each)

- Q7. Discuss the Water Management technique in Maize, Cotton, Tomato, Sugarcane and Kinnow in detail?
- Q8. What is Sprinkler irrigation system? What are the main components of sprinkler irrigation system? Write its advantages and disadvantages. Draw a labeled layout diagram of sprinkler irrigation system?
- Q9. Discuss in detail about Water Resources and Overtime Irrigation Development in India and Punjab.