

Code No: R194135B

**R19**

**Set No. 1**

**IV B.Tech I Semester Advance Supplementary Examinations, March – 2023**

**WATERSHED MANAGEMENT**

**(Agricultural Engineering)**

**Time: 3 hours**

**Max. Marks: 75**

*Answer any FIVE Questions  
ONE Question from Each unit  
All Questions Carry Equal Marks*

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**UNIT I**

- 1 a) Describe briefly the land use practices followed at present. [7]  
b) What is the ultimate goal of watershed development? Explain the factors influencing to achieve the goal. [8]

(OR)

- 2 a) Why topographical survey is required in the development of watershed? Explain. [7]  
b) How do you the find soil characteristics in a watershed? [8]

**UNIT II**

- 3 a) Classify the various watershed characteristics & its importance in watershed management. [7]  
b) What is the need of hydrologic data in watershed planning? Explain. [8]

(OR)

- 4 a) How do you plan a watershed based on land capability classes? [7]  
b) Write a short note on Water budgeting in a watershed. [8]

**UNIT III**

- 5 a) Describe briefly about rainwater conservation technologies. [7]  
b) Explain about the following dry farming land management techniques: [8]  
i) inter-terrace and ii) inter-bund

(OR)

- 6 a) Describe the concept of Integrated watershed management and explain how is it useful for socio economic development? [7]  
b) Differentiate between agriculture and Horticulture? Explain how the arable lands are suitable for these activities? [8]

**UNIT IV**

- 7 a) Describe the effect of land management on watershed hydrology. [7]  
b) Explain the various maintenance activities required for watershed program. [8]

(OR)

- 8 a) Describe the effect of cultural practices on watershed hydrology. [7]  
b) How do you monitor a watershed program? Explain. [8]

**UNIT V**

- 9 a) Explain the importance of Social Mobilization in a watershed. [7]  
b) What are the factors responsible for failure of community organizations? [8]

(OR)

- 10 a) What is community organization? Explain its role in watershed management projects. [7]  
b) Explain the role of women in watershed management. [8]

