Code: CE8T4C

IV B.Tech - II Semester – Regular / Supplementary Examinations July -2021

WATERSHED MANAGEMENT (CIVIL ENGINEERING)

Duration: 3 hours Max. Marks: 70

PART - A

Answer *all* the questions. All questions carry equal marks

 $11 \times 2 = 22 \text{ M}$

1.

- a) What is the need of Watershed Development?
- b) List out Factors that affect Watershed Management.
- c) What are the consequences of SoilErosion?
- d) List out the climatic factors that influence the Erosion.
- e) What are the advantages and disadvantages of Rainwater Harvesting.
- f) List out various Rainwater Harvesting Methods.
- g) State soil moisture conservation techniques.
- h) Explain Reclamation of saline and alkaline soils.
- i) Explain about Silvi pasture.
- j) List out the administrative requirements to manage the watershed.
- k) What is the role of ICRISAT in Watershed Management?

PART – B

Answer any *THREE* questions. All questions carry equal marks. $3 \times 16 = 48 \text{ M}$

- 2. a) Explain in detail about the integrated watershed management approach.6 M
 - b) Explain in detail about Characteristics of Watershed. 10 M
- 3. a) Explain types of erosion in detail. 8 M
 - b) Explain briefly about Contouring Techniques to control the soil erosion.

 8 M
- 4. a) What are harvesting structures? Explain any three in detail with figures. 8 M
 - b) Explain in detail the methods used for artificial recharge.

8 M

5. a) Explain Inter, Mixed and Strip cropping.

8 M

b) Explain horticulture, social forestry and afforestation.

8 M

- 6. a) Explain Watershed Management Activities with a CaseStudy.8 M
 - b) Bring out the importance of people's participation in the preparation of action plan and management activities of watershed.

 8 M