

Code: CE8T4C

**IV B.Tech - II Semester – Regular / Supplementary Examinations
March 2020**

**WATERSHED MANAGEMENT
(CIVIL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

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

11 x 2 = 22 M

1.

- a) Define Watershed? List the objectives of watershed development.
- b) Classify the land capability in brief.
- c) Write a short note on soil profile and soil horizons.
- d) Write a short note on gully control and rock fill dams.
- e) List out different types of soil erosion.
- f) What are the various types of rain water harvesting?
- g) What is the role of ecosystem?
- h) What is crop husbandry and soil enrichment?
- i) Write a short note on biomass management.
- j) Bring out the role of peoples participation in watershed management.
- k) Write a brief note on project implementation agencies.

PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. Explain in detail about the characteristics of Watershed. 16 M
3. a) Write a brief note on effects of erosion on land fertility and land capability? 4 M
- b) How do you estimate soil lost due to erosion and discuss about universal soil loss equation? 12 M
4. a) Enumerate about Reclamation of alkaline soils. 6 M
- b) Discuss about soil and soil moisture conservation measures. 10 M
5. a) Explain about factors affecting sustainable agriculture. 8 M
- b) Write short notes on following terms: 8 M
(i) Silvopastures (ii) Horticulture (iii) Social Forestry
6. a) Discuss NGO's and ICRISAT efforts on watershed management. 10 M
- b) Explain about government projects on watershed management. 6 M