

Code No: RT41358

**R13****Set No. 1**

IV B.Tech I Semester Supplementary Examinations, February - 2019

**WATERSHED MANAGEMENT**

(Agriculture Engineering)

Time: 3 hours

Max. Marks: 70

*Question paper consists of Part-A and Part-B**Answer ALL sub questions from Part-A**Answer any THREE questions from Part-B*

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**PART-A (22 Marks)**

1. a) Explain the basic objectives of watershed management. [4]  
b) Explain Watershed delineation. [3]  
c) Explain the effect of erosion on land fertility. [4]  
d) Define RWH. What are the benefits of RWH? [4]  
e) What is land use and land cover? [4]  
f) What is reservoir routing? [3]

**PART-B (3x16 = 48 Marks)**

2. a) Explain in detail about the integrated watershed management approach. [8]  
b) Discuss watershed management as a part of sustainable development. [8]
3. a) Discuss about different runoff measuring devices in watershed. [8]  
b) Classify the various watershed characteristics & its importance in watershed management. [8]
4. a) Explain Universal soil loss equation in detail. [8]  
b) Discuss in detail about Erosion control methods:  
(i) Furrowing (ii) ploughing (iii) rock fill dams. [8]
5. a) Write a short note on Check dams and Farm ponds. [8]  
b) Explain in detail the methods use for artificial recharge. [8]
6. a) Explain reclamation procedure for alkaline and salt affected soils? [8]  
b) Discuss about the land capability classification. [8]
7. a) What is strip cropping? Discuss different types of biomass management. [8]  
b) What is crop husbandry and sustainable agriculture? Explain them. [8]