

Code No: RT42013D

R13**Set No. 1****IV B.Tech II Semester Supplementary Examinations, July/August - 2017****WATER SHED MANAGEMENT****(Civil 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*

PART-A (22 Marks)

1. Write short notes on the following
 - a) Objectives of watershed management [4]
 - b) Geomorphologic Characteristics of watershed [4]
 - c) Brushwood dam, Gabion and gully control [4]
 - d) Farm ponds with neat sketch. [4]
 - e) Land grading operation. [3]
 - f) Application of watershed models. [3]

PART-B (3x16 = 48 Marks)

2.
 - a) Briefly explain the concept and principles of watershed management system. [8]
 - b) Explain in detail about the integrated watershed management approach? [8]
3. Explain in detail about the different characteristics of watersheds [16]
4.
 - a) Briefly explain the classification of soil erosion. [8]
 - b) Discuss the factors affecting and its causes of soil erosion [8]
5.
 - a) Distinguish between surface flow harvesting and subsurface flow harvesting. [8]
 - b) Write short note on percolation tanks. [8]
6. Define Land use and Land capability? What are the different objectives of Land capability classification? Explain in detail about the classification of land capability? [16]
7.
 - a) Write a note on history and evolution of watershed modeling. Mention different models that are being developed. [8]
 - b) Write short notes on advances of watershed models. [8]