

B.E. Eighth Semester (Civil Engineering) (C.B.S.)
Elective - II : Watershed Management

P. Pages : 2

Time : Three Hours



NKT/KS/17/7533

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Explain consumptive use of water by crop and factors affecting consumptive use. **6**
b) Give the classification of available soil water. **7**

OR

2. a) What are the remedial measures for reclamation of water logged areas? **7**
b) Give the causes and effects of water logging. **6**
3. a) Explain physical elements of watershed. **6**
b) How the vegetative management can improve the water yield and quality of watershed? **7**

OR

4. a) Explain different types of soil erosion and control measures for it. **7**
b) What do you mean 'water auditing'? Give it's advantages. **6**
5. a) What are the various water harvesting techniques? Explain any one in detail. **7**
b) How agronomical measures help soil and water conservation? Explain with example. **7**

OR

6. a) Explain elements of water harvesting techniques. **7**
b) How the estimation of peak runoff rate is done? Explain the procedure. **7**
7. a) Give the causes and effects of soil erosion. **7**
b) Give the classification of land and soil. **6**

OR

8. a) How the identification of critical areas is done? 7
b) Explain "Catchment area treatment". 6
9. a) Explain the importance of public participation in watershed management. 7
b) How GIS is used in watershed management? 7
- OR**
10. a) Write short note on - 14
i) Conservation farming.
ii) Objectives of watershed management.
11. a) Explain USLE model for soil erosion. 7
b) Explain 'curve number method'. 6
- OR**
12. a) What is runoff modeling used for? How it done? 7
b) Explain various modelling methods in brief. 6
