

**B.TECH
(SEM VI) THEORY EXAMINATION 2017-18
WATERSHED PLANNING & MANAGEMENT**

Time: 3 Hours

Total Marks: 100

Note: Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x 10 = 20**

- a. Define Drainage.
- b. What do you understand by vevation?
- c. Define terracing.
- d. Define Rockfill dams.
- e. Write the parameters of of watershed.
- f. Define watershed length.
- g. What are soil erodibility?
- h. What is the size of a typical watershed?
- i. What are the basic objectives of watershed management?
- j. Define function of watershed.

SECTION B**2. Attempt any three of the following: 10 x 3 = 30**

- a. Explain classification of erosion along with examples.
- b. What is dry land Agriculture? Explain in detail.
- c. What are the saline soils widespread? What are the reclamation measures for these soils?
- d. Why does watershed deterioration occur?
- e. Is there a code for symbol for the watersheds in the country? Explain in brief.

SECTION C**3. Attempt any one part of the following: 10 x 1 = 10**

- (a) Explain the details needed for preparation of a plan for understanding the various disciplines used in watershed management and their inter relationships.
- (b) Write short notes on the following (i) Geometric representation of watershed (ii) Geomorphological characteristics of watershed.

4. Attempt any one part of the following: 10 x 1 = 10

- (a) Enumerate the effects of erosion on land fertility and land capability.
- (b) Explain bench terrace in detail.

5. Attempt any one part of the following: 10 x 1 = 10

- (a) Describe in detail the various approaches involved in dry land agriculture.
- (b) How are an agricultural programme worked out? Explain, giving an example of cropping pattern with sowing time.

- 6. Attempt any *one* part of the following: **10 x 1 = 10****
- (a) Explain characteristics of raindrops and its impact as soil erosion.
 - (b) Define the following (i) Specification of contour trenches. (ii) Alignment and construction of contour trenches.

- 7. Attempt any *one* part of the following: **10 x 1 = 10****
- (a) Explain the term Rainwater harvesting. What are rain water harvesting practices? Explain them in detail.
 - (b) Define relevance of the development and effective utilization of Agro Industrial infrastructure in watershed management.