

320850(20)

**BE (8th Semester)
Examination, Nov.-Dec., 2021
(New Scheme)**

Watershed Management

Time Allowed : 3 hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Attempt all questions. Part (a) of each question compulsory and carries 2 marks. Attempt any two parts from (b), (c) and (d) carry 07 marks each.

1. (a) What do you mean by watershed?
- (b) What are the important characteristics of watershed? Explain with neat sketches.
- (c) Explain the different types of soil and its availability in major regions of India.
- (d) What do you mean by water requirement of crops? Explain the factors affecting the water requirement of crops.

2.
 - (a) What do you mean by land capability?
 - (b) What are the various factors that help to determine the land capability? Explain.
 - (c) Explain the classes of land capability classification in detail.
 - (d) What are the objectives of land capability classification? Explain.

3.
 - (a) Define soil erosion.
 - (b) Discuss the different types and causes of soil erosion.
 - (c) Define water harvesting. Discuss the engineering methods of water harvesting in watershed. Explain with neat sketches.
 - (d) What are the agronomical measures in soil and water conservation? Explain.

4.
 - (a) Define the concept of watershed management.
 - (b) What is integrated watershed management approach (IWMA)? Explain its different objectives.
 - (c) What is benchmark survey for watershed? Enlist the various points considered in the benchmark survey.
 - (d) Discuss the use of GIS and remote sensing in watershed management.

5. (a) What do you mean by hill slope?
- (b) What are the major causes of bad lands (waste lands) in the watershed? Explain.
- (c) Discuss in detail about hill slope conservation.
- (d) What measures would be taken in bad land (waste land) development?
-