

M. Tech.-IV (Civil-Hydraulic Engineering) (CBCS – 2015 Course) :

SUMMER - 2019

**SUBJECT: SELF STUDY PAPER – II SOIL CONSERVATION & WATERSHED
MANAGEMENT**

Day: Thursday
Date: 13/06/2019

S-2019-3443

Time: 11.00 AM TO 02.00 PM
Max Marks. 60

N.B.

- 1) All questions are **COMPULSORY**
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Answer to both the sections should be written in **SAME** Answer book.
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SECTION - I

Q.1 Describe the effect of hydrology on watershed and soil conservation practice. **(10)**

OR

Explain the effect of climate on watershed and water conservation practice.

Q.2 How do you estimate the soil erosion due to water? Explain in brief. **(10)**

OR

What is gully erosion? Explain the factors affecting gully erosion.

Q.3 Describe mulching and crop rotation methods for water erosion control. **(10)**

OR

Explain the land classification with respect to soil conservation.

SECTION - II

Q.4 What are the causes of water logging? Explain with sketches the types of tile drainage system used for drainage of water logged lands. **(10)**

OR

Describe the land management and crop planning for soil conservation in hilly areas.

Q.5 Describe the land use planning and planning for rainfall utilization in semiarid zones. **(10)**

OR

What are the problems of arid zones in India? Discuss the controlling measures to solve these problems.

Q.6 What is meant by channel improvement? Describe techniques of channel improvement. **(10)**

OR

Describe flood control measures adopted in watershed management.

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