(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID: 189661

Roll No.

B.TECH.

Theory Examination (Semester-VI) 2015-16

WATERSHED PLANNING & MANAGEMENT

Time: 3 Hours Max. Marks: 100

Section-A

 $(2\times10=20)$

- Q1. Attempt all parts of the following:
 - (a) Define Watershed?
 - (b) Name any two examples of Watershed management carried out in India?
 - (c) What do you mean by open well yield?
 - (d) Mention any two diversion structures?
 - (e) Differentiate between sand and sediment?
 - (f) Give any four methods of in-situ moisture conservation methods?

(1) P.T.O.

- (g) Define the term "watershed Hydrology"?
- (h) Name any two methods of people's participation in a soil conservation programme?
- (i) What is soil conservation?
- (j) Mention any two case studies of India adopted foe watershed management?

Section-B

Q2. Attempt any five parts of the following: $(10 \times 5 = 50)$

- (a) Explain the project formulation for a hilly watershed?
- (b) How a step by step evaluation be ensured for the development of watershed management?
- (c) "Rainwater harvesting is the need of today" Comment on it in details?
- (d) What is the effect of cropping pattern on water budgeting of a watershed?
- (e) What do you mean by watershed delineation? Explain?

- (f) Mention the current report of rainwater conservation technologies?
- (g) Explain the factors affecting the watershed management under Indian scenario?
- (h) What are the basics of land use assessment assessment?

Section-C

Attempt any two parts of the following: $(15\times2=30)$

- Q3. Write an essay on "Problems and Prospects of watershed management"?
- Q4. "Discuss the hydrologic and hydraulic design of earthen embankment"?
- Q5. Write short note on the following:
 - (i) Watershed characteristics.
 - (ii) Optimal land use models.

(3) P.T.O.