Printed Pages : 2

(Following Paper ID and Roll No. to be filled in your Answer Book)
PAPER ID : **180753**
Roll No.

B. Tech.

(SEM. VII) (ODD SEM.) THEORY
EXAMINATION, 2014-15

WATERSHED PLANNING AND MANAGEMENT

Time : **3** Hours] [Total Marks : **100**

Note : Attempt all questions.

1 Attempt any five of the following : 4×5=20

(a) Define a watershed. How it differs from a catchment?

(b) How will you do the water yield assessment from a watershed?

(c) What is the effect of cropping system on water budgeting?

(d) What do you understand by watershed hydrology?

(e) How will you proceed for planning of a project proposal?

(f) What is the role of cultural practices on watershed hydrology?

(g) List the hydrological data required for watershed planning?

2 Attempt any four of the following : 5×4=20

(a) Briefly explain the problems faced during the implementation of watershed management programmes.

(b) What do you understand by delineation of priority watershed?

(c) What is sediment and causes of sedimentation?

(d) What do you understand by broad based bunds ?

(e) Mention any five case studies of watershed development of our country and the advantages received.

3 Attempt any two of the following :

(a) Explain the watershed based land use planning.

(b) Discuss the hydrologic design of earthen embankment with the help of a neat sketch.

(c) What are the in-situ rainwater conservation technologies? Explain in detail.

4 Attempt any two of the following :

(a) Discuss the impact of evaluation and monitoring of watershed programmes.

(b) Write a essay on " Cost benefit analysis of watershed programmes".

(c) Discuss the role of " People's Participation" in watershed management programmes.

5 Attempt any two of the following :

(a) What are the physical and geomorphic characteristics of watershed? Explain.

(b) Describe the hydraulic design of diversion structure with the help of a diagram.

(c) Write short note on the following :

(i) Factors affecting on watershed management.

(ii) Sediment yield models.

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