Printed Pages: 2

EAG-013

(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: $5\times4=20$

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

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- (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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