

Code: R7420104

R7**B.Tech IV Year II Semester (R07) Advanced Supplementary Examinations June 2012****WATERSHED MANAGEMENT****(Civil Engineering)**

Time: 3 hours

Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain the term watershed with sketch.
(b) State four objectives of watershed management.
- 2 Explain the following characteristics with respect to watershed management.
(a) Climate
(b) Land use
(c) Geology and soils
(d) Hydrology.
- 3 (a) What are the effects of erosion on land fertility and land capability?
(b) What is universal soil loss equation?
- 4 (a) What is gully formation? Explain the measures to control gullies.
(b) What is bench terracing? Explain with a neat sketch.
- 5 (a) Explain various water harvesting structures.
(b) How do you achieve soil moisture conservation through check dams and percolation tanks?
- 6 (a) How do you manage the following in a watershed development programme?
(i) Forest (ii) Agricultural lands and (iii) Grass lands.
(b) What is meant by reclamation? What are reclamation measures for alkaline soils?
- 7 Explain the terms crop husbandry mixed and strip cropping, Silvi pasture horticulture. Also explain afforestation.
- 8 (a) How do you prepare an action plan to implement a new watershed management plan?
(b) What is the role of people participation in watershed management?
