

GUJARAT TECHNOLOGICAL UNIVERSITY
Diploma Engineering - SEMESTER–VI • EXAMINATION – SUMMER 2013

Subject Code: 360611**Date: 17/05/2013****Subject Name: Hydrology and Watershed Management****Time: 10:30 am TO 01:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

- Q.1** (a) Discuss "Available Water resources in Gujarat state" **07**
(b) With neat sketch explain the watershed. **07**
- Q.2** (a) State characteristics of watershed **07**
(b) Enlist types of soil erosion. Explain any one in detail. **07**
- OR**
- (b) Discuss need of soil conservation. **07**
- Q.3** (a) Write short note on Bench Terracing. **07**
(b) Describe design parameters for Bunds. **07**
- OR**
- Q.3** (a) Enlist agronomical measures to control soil erosion. Explain any one. **07**
(b) Explain grass waterways. **07**
- Q.4** (a) Define water harvesting and describe importance of it. **07**
(b) Explain components of rooftop water harvesting. **07**
- OR**
- Q. 4** (a) Enlist traditional methods of water harvesting. Explain any one. **07**
(b) Write short note on a watershed structure check dam. **07**
- Q.5** (a) Explain gully plugging. **07**
(b) Describe sub surface dykes. **07**
- OR**
- Q.5** (a) Discuss need of biomass management. **07**
(b) Discuss people's participation in watershed management. **07**
