Seat	No.:	Enrolment No		
		GUJARAT TECHNOLOGICAL UNIVERSITY ME – SEMESTER IV (NEW) – • EXAMINATION – SUMMER 2016		
Subject Code: 2743301 Date:0			16	
	U	Name: Flood Management		
Time:10:30 am to 01:00 pm Total Mai			ks: 70	
	ruction	1		
	1. 2. 3.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a) (b)	Distinguish flooding of river - Tapiøand river - Brahamputraøin detail.  Differentiate between - man madeøand - naturaløflooding of river basins.	07 07	
Q.2	(a)	Explain flood routing in channels and reservoirs. Enlist various methods available for both.	07	
	(b)	Explain flood plain mapping and flood zoning in detail.	07	
		OR		
	<b>(b)</b>	Explain real-time flood warning and flood forecasting in detail.	07	
Q.3	(a)	Describe structural and non- structural flood management measures in detail.	07	
	(b)	How climate change is responsible for flooding of Indian rivers? Give parameter wise details.	07	
		OR		
Q.3	(a)	How :effective watershed management@could prevent flood in channels?	07	
	(b)	Define any two in brief I. Flood index II. E1-Nino III. La-Nina IV. Indian Ocean Dipole (IOD)	07	
Q.4	(a)	Explain theory of flash floods in detail through illustrations.	07	

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Write a review of flooding of river : Machhuødue to dam failure of 1979.

OR

Describe various types of numerical models of flood propagation.

Describe the sociopolitical response of flood and flood protection.

Explain HEC-RAS model applications in flood management.

Explain SWAT model applications in flood management.

Write a note on flooding of rivers in Gujarat State.

Define the economics of flood protection briefly.

OR

**(b)** 

(a)

**(b)** 

(a)

**(b)** 

(a)

**(b)** 

**Q.4** 

**Q.5** 

**Q.5** 

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