Seat No Enrollient No	Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC - SEMESTER-I- EXAMINATION - SUMMER 2016

Subject Code:X10602 Subject Name:ENGINEERING GEOLOGY Time:02:30 PM to 05:00 PM Instructions:			Date:04/06/2016 Total Marks: 70	
		2:30 PM to 05:00 PM Total Marks		
		Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	Define the geology, petrology and mineralogy. Describe the chief branches of geology.	07	
	(b)	Describe the rock cycle.	07	
Q.2	(a) (b)	Describe important physical properties of minerals, giving illustrations. Classify the following rocks according to their origin and give their uses. (i) Phyllite (ii) Schist (iii) Gabbro (iv) Granite (v) Sandstone (vi) Dolerite (vii) Conglomerate.	07 07	
Q.3	(a) (b)	Narrate the textures and structures observed in igneous rocks. Discuss important techniques adopted for control of landslides.	07 07	
Q.4	(a)	State various applications of remote sensing and GIS in civil engineering.	07	
	(b)	State the geological properties of a good building stone.	07	
Q.5	(a) (b)	Narrating suitable examples, describe the chemical weathering of rocks. Discuss the suitability of a tunnel \underline{or} a dam alignment in folded rock formations.	07 07	
Q.6	(a)	Write notes on the following topics: (i) Dip and strike of beds (ii) Unconformities	07	
	(b)	Write notes on the following topics: (i) Parts of a typical fault (ii) Agents and kinds of metamorphism	07	
Q.7	(a) (b)	Drawing a sketch, describe the subsurface distribution of ground water. Describe the objects of geological investigations for civil engineering projects.	07 07	
