Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC - Ist Semester–Examination – May/June- 2012

Subject code: X10602

Subject Name: ENGINEERING GEOLOGY

Date:02/06/2012 **Time: 10:30 am – 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.**

Q.1	**(a)**	Describe any three important physical properties of minerals.	**07**
	(b)	Describe the disintegration of rocks, giving suitable examples.	**07**
Q.2	**(a)**	Write notes on the following topics: (i) Parts of a typical fold (ii) Mechanism of faulting	**07**
	(b)	How are landslides caused?	**07**
		OR	
	(b)	Write a note on uses of remote sensing techniques in civil engineering.	**07**
Q.3		Write notes on the following topics:	
	(a)	Textures in Igneous rocks	**07**
	(b)	Factors and kinds of metamorphism	**07**
		OR	
Q.3		Write notes on the following topics:	
	(a)	Formation of sedimentary rocks	**07**
	(b)	Rock cycle	**07**
Q.4		Write on the following topics:	
	(a)	Outcrops, inliers and outliers	**07**
	(b)	Role of geology in civil engineering	**07**
		OR	
Q.4	**(a)**	Describe the electrical resistivity method for subsurface geological investigation.	**07**
	(b)	Discuss the importance of geological maps and sections.	**07**
Q.5	**(a)**	Describe the properties of a good building stone.	**07**
	(b)	Classify the following rocks as per their origin: (i) Granite (ii) Limestone (iii) Marble (iv) Shale (v) Basalt (vi) Quartzite (vii) Sandstone	**07**
		OR	
Q.5	**(a)**	Narrate the merits and demerits of dam sites situated on faulted sequence of rock formations.	**07**
	(b)	Describe various sources of ground water.	**07**

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