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Rol	I No. Total No. of Pag	jes : 01
Tot	al No. of Questions: 08 M.Tech. Civil Engg. EL-II (2016 Batch) (Sem.–2) ENGINEERING ROCK MECHANICS	
Subject Code: MTCE-213 Paper ID: [74306] Time: 3 Hrs. Max. Marks:		
1. 2.	TRUCTIONS TO CANDIDATES: Attempt any FIVE questions out of EIGHT questions. Each question carries TWENTY marks.	
1.	(a) Differentiate between engineering geology and rock mechanics.	(6)
	(b) Give engineering classification of intact rocks on the basis of strength.	(8)
	(c) Define Stress Reduction factor.	(6)
2.	(a) Give a brief account of different types of faults and the reasons for their form(b) A reservoir is to be created for applying drinking water to an industria putting a dam across the river running nearby. Discuss briefly the g	(10) l area by geologica
	considerations you will take into account in fixing up the site for the dar reservoir.	n and the
3.	(a) What is meant by 'rock quality designation'? How rock classification is do basis of rock quality designation?	ne on the (10)
	(b) Write a short note on Stereonet Analysis.	(10)
4.	(a) How does information about elasticity of a rock mass help in designing over them?	structures (10)
	(b) Discuss any one <i>in-situ</i> test for testing the deformability of a rock mass.	(10)
5.	"Behaviour of rocks in time dependent". Discuss the factors responsible dependent behaviour of rocks. Explain in detail.	for time (20)
6.	Discuss in detail about application of rock mechanics to underground structur and foundation.	es, slopes (20)
7.	(a) Discuss the Griffith's theory of fracture in rock mass.	(10)
	(b) What is "stick-slip" process of rupture?	(10)
8.	Write short notes on:	
	(a) Stabilisation Principles	(10)
	(b) Underground excavation and stability.	(10)