

GUJARAT TECHNOLOGICAL UNIVERSITY

B. E. SEMESTER: VII

MINING ENGINEERING

Subject Name: **Rock Slope Engineering (Department Elective-I)**

Subject Code: **172205**

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	University Exam (E)		Mid Sem Exam (Theory) (M)	Practical (Internal)
				Theory	Practical		
4	0	2	6	70	30	30	20

Sr. No	Course Content	Total Hrs.
1.	Introduction, Basic Mechanics of rock and spoil, slope failures, Geological data collection. Geophysics for open pit sites, Shear Strength, Groundwater flow.	12
2.	Design of slopes, Principles and scope. Slope design of plane, wedge and circular failures. Stability analysis.	12
3.	Support and reinforcement of rock slopes.	10
4.	Monitoring of slopes. Blasting practice for rock slopes.	10
5.	Economics and Planning consideration.	12

Text Books/ Reference Books:

1. A handbook of Surface Mine Technology- Samir Kumar Das
2. Rock Slope Engineering – E.Hoek & J.W.Bray
3. Rock Slope Engineering – Duncan C. Wyllie, Christopher W. Mah & Evert Hoek