

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E Semester: 3 Mining Engineering

Subject Code 132202
Subject Name Mine Development

Sr.No	Course contents
1.	Different methods of entering into a deposit to be worked out by underground mining Adit, Shaft, incline shaft, incline, decline. Their merits and demerits and applicability, optimum location of shaft.
2.	Horizontal Development Small and medium size, drifting and tunneling : Shape, size and gradient of drives and tunnels. Conventional method of drifting Drilling blasting, loading and transport of muck support, ventilation drainage. Drivage work in varying ground conditions using conventional methods.
3.	Fast drivage and tunneling using jumbos, bores, trackless mucking and transportation units, description and details of machines, Large size drives and tunnels : Different methods of driving.
4.	Vertical Development Conventional method of raising by raise climbers, long hole raising of driving.

Reference Books:

1. Elements of Mining Tecchnology, D.J.Deshmukh Part I, II & III
2. A Study of Metalliferous Mining methods, Y.P.Chacharkar
3. Universal Mining School- Part I & II
4. Coal Mining, B.Ghosh
5. Open cast Mining, B. Ghosh