

DIPLOMA COURSE IN MINING ENGINEERING

SECOND SEMISTER

~~S-4603~~ MINE SKETCHING

S-4303

Exam Scheme:

Practical: 50 Mks

Term Work: 50 Marks

Teaching Scheme:

Practical 4 Hrs.

RATIONALE:

This subject is designed to improve the drawing & imaginary skill of the students which help them in drawing the figures & rough sketches on the mine sites, where they comes across machines and their components.

OBJECTIVES:

Students are required to draw minimum ten sketches of real object or field visit, data or model. Dimensions should be marked by actual measurement or given data, wherever applicable.

LIST OF SKETCHES:

1. Mine Tubs
2. Rope Cappel
3. Safety Hook
4. Winding Drum
5. Tub Couplings
6. Headgear and winding arrangement (Model)
7. Safety Devices on Haulage
8. Haulage Clips
9. Roof Bolts
10. Various types of ropes
11. Fire extinguishers
12. Sketch of different models of pit top layout
13. Arial Rope way
14. Sketch of drill hole patterns
15. Open pit layout
16. Under carriage of Heavy Earth Moving Machinery
17. Back Hoe and Front end Excavator: Bucket & attachment
18. Types of Dumpers: Based on mine visit
19. Opencast benches
20. Layout of waste dumps

Reference Books:

1. Elements of Mining Technology, Vol-II by D. J. Deshmukh
2. Mining Engineers Hand Book Vol – I & II by Pele
3. Mine Pumps, Haulage and Winders by S. Ghatak
4. UMS Series Vol I, II & III