

AMMI-17 ADVANCED METHODS OF MINING

UNIT-1 CONTENTS

- 1.1 Supports; Powered supports, their Classification,
- 1.2 Principles of operation and design,
- 1.3 Constructional features and application,
- 1.4 Support of wide excavation, longwall faces and depillaring,
- 1.5 Hydraulic fluids, Shotcreting, Roof stitching

UNIT-2 SPECIAL SURFACE MINING SITUATIONS

- 2.1 Mining over old underground workings;
- 2.2 Placer mining: hydraulicking, dredging, dump leaching, deep sea mining.
- 2.3 Highwall mining.
- 2.4 Steep angle conveyor, high angle conveyor,
- 2.5 Mining by surface miner, In pit crushing and cross pit conveying techniques.
- 2.6 Application of skip transportation in open cast mines.
- 2.7 Cross pit conveying,
- 2.8 High wall mining, Twin bench blasting,
- 2.9 Blast design for casting, coyote blasting, chamber blasting,
- 2.10 Application and use of GPS and Geomedia software

UNIT-3 MINING OF COAL UNDER DIFFICULT SITUATIONS

- 3.1 Contiguous seams,
- 3.2 Seams prone to outburst and bumps;
- 3.3 Mining of seams prone to fire and spontaneous combustion,

Reference Book:

1. Principles and Practices of Modern Coal Mining Paperback – 1 January 1997 by R.D. Singh (Author)