

## **MIPC2005 UNDERGROUND COAL MINING (3-0-0)**

### **Module-I:(8Hours)**

Selection of mining methods, classification of method of coal mining. Underground mining method, Comparison of underground mining methods, Opening of coal seams: Types of mine entries (shaft, incline, adit), Relative advantages and disadvantages, Location of the entries, percentage of extraction, Manpower calculation, Productivity calculation, incubation period.

### **Module-II:(10Hours)**

Development& Extraction by B&P Method of Mining, Depillaring.

### **Module-III:(10Hours)**

Longwall Mining Method: Classification, Application on Development and extraction, face mechanization, Power support.

### **Module-IV:(10 Hours)**

Horizon Mining, Contiguous Mining. Application & Layout.

### **Module-V:(8Hours)**

Mining equipment and production machines used below ground. Stowing and Filling Methods, gathering, and transportation arrangements. Introduction to Advanced Technologies

### **Books:**

1. Principles and Practices of Modern Coal Mining, R. D. Singh, New Age International, New Delhi, 1997
2. Underground Winning of Coal, T.N.Singh, Oxford & IBH, New Delhi, 1992
3. Modern Coal Mining Technology, S.K.Das, Lovely Prakashan, Dhanbad, 1992
4. Elements of Mining Technology, Volume-2, D.J.Deshmukh, Denett & Company, 2016
5. Coal Mining Practice, I.C.F.Statham, Caxton Eastern Agencies, Calcutta, Reprint, 1964