

PMI3I101 INTRODUCTION TO MINERAL PROCESSING (3-0-0)

Module I

(10 hours)

Definition of Minerals And Ore, Economics of mineral processing, grade-recovery curve, Liberation, degree of Liberation.

Module II

(10 hours)

Important Unit operations-Comminution, physical separation, magnetic and electrostatic separation, chemical separation processes, mass balances(Two and three product system)

Module III

(10 hours)

Size separation-laboratory and Industrial techniques, classification, dewatering,

Module IV

(06 hours)

Waste disposal, Flow sheet development, environmental issue.

Text Books:

1. Mineral Processing Technology by B.A. Wills and Tim Napier-Munn

References:

1. Jain, S.K., Ore Processing, Oxford – IBH Publishing, 1984.
2. Gaudin, A.M., Principles of Mineral Dressing – McGraw Hill Book Company, 1971.
3. Taggart, A.F., Handbook of Mineral Dressing, John Wiley and Sons, New York, 1990.
4. Wills, B.A. Mineral Processing Technology, Pergamon Press, 1985. 5. Vijayendra, H.G., Handbook on Mineral Dressing, Vikas Publishing House Pvt. Ltd. 1995.