## PMI6I101 FLOW-SHEET DESIGN AND PLANT LAYOUT (3-1) (PROFESSIONAL CORE PAPER)

Module I (08 hours)

Solid and water balance calculations for the estimation of flow rates in beneficiation circuits.

Module II (08 hours)

General guidelines for plant design. Size selection for a mineral beneficiation plant and for a coal preparation plant: Broad criteria.

Module III (10 hours)

Flow sheet development for a coking coal and non-coking coal washery on individual and blended feed basis. Flow sheet development for Iron ore, copper and beach sand beneficiation plants.

Module IV (10 hours)

Rated capacity and peak load capacity of the plants. Material flow diagram, general equipment arrangement. General guidelines on plant layout for a coal, iron ore, copper, lead-zinc and beach sand beneficiation.

## FLOW-SHEET DESIGN AND PLANT LAYOUT LAB

Flow sheet design of different minerals like coal, iron ore, copper, lead-zinc and beach sand etc, their details study and optimizing the circuit to get maximum yield and efficiency.