# AMPR26 PROCESS PLANNING AND COST ESTIMATION

### **UNIT-1 INTRODUCTION TO PROCESS PLANNING**

- 1.1 Introduction- methods of process planning
- 1.2 Drawing interpretation-Material evaluation steps in process selection
- 1.3 Production equipment and tooling selection

## **UNIT-2 PROCESS PLANNING ACTIVITIES**

- 2.1 Process parameters calculation for various production processes
- 2.2 Selection jigs and fixtures election of quality assurance methods
- 2.3 Set of documents for process planning-Economics of process planning

## UNIT-3 INTRODUCTION TO COST ESTIMATION

- 3.1 Importance of costing and estimation- methods of costing-elements of cost estimation
- 3.2 Types of estimates- Estimating procedure
- 3.3 Estimation labor cost, material cost- allocation of overhead charges
- 3.4 Calculation of depreciation costantered Ingineer

## **UNIT-4 PRODUCTION COST ESTIMATION**

- 4.1 Estimation of Different Types of Jobs
- 4.2 Estimation of Forging Shop, Estimation of Welding Shop, Estimation of Foundry Shop

## UNIT-5 MACHINING TIME CALCULATION

- 5.1 Estimation of Machining Time Importance of Machine Time Calculation
- 5.2 Calculation of Machining Time for Different Lathe Operations, Drilling and Boring
- 5.3 Machining Time Calculation for Milling, Shaping and Planning
- 5.4 Machining Time Calculation for Grinding.

#### **References Books:**

- 1. Peter scalon, "Process planning, Design/Manufacture Interface", Elsevier science technology Books, Dec 2002.
- 2. Sinha B.P, "Mechanical estimating and Costing", Tata-McGraw Hill publishing co, 1995.