

## 1.8 10008 MANUFACTURING PROCESS

### UNIT-1 INTRODUCTION:

- Concept of manufacturing process and its importance
- Production/manufacturing and assembly process
- Classification of manufacturing/production processes
- manufacturing process selection

### UNIT-2 PRIME MOVER

- Steam turbine, classification of turbine, steam turbine, gas turbine, water turbine, heat engine,
- I.C engine ,two stroke petrol engine, 4 stroke petrol engine,
- 2 stroke diesel engine,4 stroke diesel engine, Simple problem

### UNIT-3 REFRIGERATION AND AIR CONDITIONING

- Introduction, refrigeration, types of refrigeration,
- coefficient of performance, refrigerants, and properties of refrigerant, air conditioning

### UNIT-4 MACHINE TOOL

- Lathe, construction and working of lathe, lathe operation,
- drilling machine, milling machine,
- grinding machine

### UNIT-5 WELDING, SOLDERING AND BRAZING

- Welding, principle of electric arc welding, Gas welding, Welding defects,
- soldering, Brazing

### UNIT-6 MECHATRONICS

- Introduction, control system,
- open loop control system, closed loop control system,
- Microprocessor based controller

### Reference Book:

1. Manufacturing Processes by Dr. K.S. Yadav
2. Manufacturing Processes by Vireder Narula