

Time: 3 Hours

Max Marks: 80

Instructions:

1. Question no. 1 is compulsory.
2. Answer any three questions of the remaining five questions.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

Q.1. Attempt the following two questions: (10 marks each).

- a. Classify Production Processes in detail. 10
- b. Compare wood and metal as pattern materials. 10

Q.2. Attempt the following two questions: (10 marks each).

- a. Describe the CO<sub>2</sub> Shell Moulding Process. 10
- b. Differentiate between MIG welding and TIG welding. 10

Q.3. Attempt the following two questions: (10 marks each).

- a. Describe Rolling process in general with a neat labeled sketch. 10
- b. Compare Drop Forging with Hammer Forging process. 10

Q.4. Attempt the following two questions: (10 marks each).

- a. Describe the Blow Moulding process for plastics. 10
- b. Describe Reaction Moulding of polymers with a neat labeled sketch. 10

Q.5. Attempt the following two questions: (10 marks each).

- a. How does a Gear Cutting process differ from a Gear Generating process? 10
- b. How can a lathe machine be specified for the purpose of purchasing? 10

Q.6. Attempt the following two questions: (10 marks each).

- a. What is meant by a 'Closed Loop Control System' and an 'Open Loop Control System'? 10
- b. What is a Transfer Line Machine? Draw a neat labeled sketch. 10