

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.
- b. Compare wood and metal as pattern materials.

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

- a. Describe the CO2 Shell Moulding Process.
- b. Differentiate between MIG welding and TIG welding.

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

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

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

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

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

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

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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'?
- b. What is a Transfer Line Machine? Draw a neat labeled sketch.

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