

03 Hours

[80 Marks]

- N.B.** a. Question no.1 is **compulsory**.  
 b. Attempt any three questions out of remaining five questions  
 c. Figures to right indicates full marks

- Q1 Write a short note on any **four** of the following [20]  
 a. Compare brazing and soldering.  
 b. CO<sub>2</sub> moulding  
 c. Thread rolling  
 d. Explosive welding  
 e. Lapping and Honing
- Q2. a. With a neat sketch explain the principle and working of thermit welding. Also discuss its advantages, limitations and application. [08]  
 b. Differentiate between the open loop and close loop system. [06]  
 c. Explain the types of flames used in gas welding. [06]
- Q3. a. Describe the desirable properties of pattern materials. [08]  
 b. Describe machining the operations performed on lathe machine. [06]  
 c. What are automatic machines? Write its classification. [06]
- Q4. a. Describe the classification, selection procedure and application of drilling machine. [08]  
 b. Explain blow moulding process with a neat sketch. [06]  
 c. Differentiate between pattern and core box. [06]
- Q5. a. Discuss various defects found in rolled parts. [08]  
 b. Define weldability and describe the factors affecting it. [06]  
 c. Differentiate between hot working and cold working processes. [06]
- Q6. a. With the help of a neat sketch explain the gating system in casting process. [08]  
 b. Define the terms 'Spread', 'Elongation' and 'Draft' with respect to rolling process. [06]  
 c. Compare thermoplastics and thermosetting plastics. [06]

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