

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 Attempt any **four** of the following [20]
a. Describe automatic machines.
b. What is thread rolling?
c. How are seamless tubes manufactured?
d. Explain explosive welding
e. Differentiate between arc welding and electron beam welding.
- Q2. a. With a neat sketch explain the principle and working of laser beam welding. Also [08]
discuss its advantages, limitations and application.
b. Differentiate between the open loop and close loop system. [06]
c. Explain gas cutting operation. [06]
- Q3. a. Compare thermoplastics and thermosetting plastics. [08]
b. Describe the desirable properties of moulding sand. [06]
c. What are transfer machines? [06]
- Q4. a. Describe types of drilling machines and there application. [08]
b. Explain blow moulding process with a neat sketch. [06]
c. What is riser? Discuss its types and application. [06]
- Q5. a. Discuss various defects found in welding. [08]
b. Define weldability and describe the factors affecting it. [06]
c. Differentiate between hot working and cold working processes. [06]
- Q6. a. What are the constituents of moulding sand? Discuss their function. [08]
b. Describe machining the operations performed on lathe machine. [06]
c. Define the terms 'Spread', 'Elongation' and 'Draft' with respect to rolling process. [06]
