



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

1. Solve any Four: [20]
  - a) What are Transfer machines?
  - b) Explain Rolling defects.
  - c) How is rod made by extrusion?
  - d) With neat sketch explain the working principle of plastic injection moulding process
  - e) Differentiate Shaper and Planner
  
2. a) Differentiate the following: [10]
  - i) Pattern and core boxes.
  - ii) Lapping and Honingb) Differentiate between TIG & MIG welding. [5]  
c) Differentiate between soldering & brazing. [5]
  
3. a) Explain rotary swaging with its sketch. [6]  
b) Describe Calendaring process for plastic with a neat labeled sketch. [6]  
c) How are Milling Machines classified with a neat sketch? [8]  
Describe any one Milling Machine.
  
4. a) Explain centreless grinding operation [5]  
b) Differentiate between core and core print. [5]  
c) What is meant by riser? State the functions of riser. [5]  
d) Discuss friction welding with its applications. [5]
  
5. a) State various vertical machining centres. Describe any one in detail [8]  
b) Differentiate between open loop and closed system in CNC machines. [6]  
c) Explain vacuum forming process of polymers. [6]
  
6. a) What is meant by forging? Differentiate closed and open die forging. [5]  
b) Write Short note on following: [10]
  - i) Machine Tools Classification
  - ii) Automatic machines
  
- c) Compare transfer moulding and compression moulding. [5]

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