Q. P. Code: 26345

Time: 3 Hours **[Total Marks: 80]**

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 Honing
   b) 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? Describe any one Milling Machine. [8]

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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