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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(PE) (Sem.-1)

**METAL FORMING**

Subject Code : PE-503

Paper ID : [E0443]

Time : 3 Hrs.

Max. Marks : 100

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

1. Explain Tresca maximum sheer strain energy criterion.
2. What is rolling? Explain different types of rolling mills.
3. Explain different types of defects in rolling, forging, extrusion, wire drawing and deep drawing.
4. Explain in detail various factors which affect rolling force.
5. Explain principles and mechanism of lubrication in metal forming processes.
6. Explain various methods of tube drawing.
7. What is true stress and true strain? Explain true stress strain curves.
8. How roll pressure for flat strip rolling in the leading and lagging zones is predicted, explain?