

Total No. of Questions : 4]

SEAT No. :

PC5

[6360]-5

[Total No. of Pages : 1

**T.E. (Mechanical Engineering)/(Automobile Engg.) (Insem)  
ADVANCED FORMING AND JOINING PROCESSES  
(2019 Pattern) (Semester - I) (Elective - I) (302045 A)**

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) All questions are compulsory. Solve Q.1 or Q.2, Q.3 or Q.4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.

**Q1)** a) Explain surface defects identification methods. [5]

b) Explain with neat sketch, working of sheet metal working processes. [5]

c) Explain in detail forming simulation process. [5]

OR

**Q2)** a) With a schematic explain deep drawing operation. [5]

b) Explain the important factors on which formability of sheet metal depends. [5]

c) State the assumptions of plasticity theory. [5]

**Q3)** a) Explain the important features of electro hydraulic forming (EHF). [5]

b) With a schematic explain Stretch forming operation. [5]

c) Explain with suitable diagram working of Electro Hydraulic Forming processes. [5]

OR

**Q4)** a) Differentiate between conventional spinning & metal spinning. [5]

b) Explain with suitable diagram the Magnetic Pulse forming process. [5]

c) Explain in detail HERF (Explosive Forming) techniques. [5]

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