

Total No. of Questions : 4]

SEAT No. :

PE5

[Total No. of Pages : 1

[6579] 305

T.E. (Automobile /Mechanical /Automation & Robotics) (Insem)
ADVANCED FORMING AND JOINING PROCESSES
(2019 Pattern) (Semester - I) (302045-A) (Elective-I)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

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

- Q1)** a) State the Surface defects identification methods and remedial process. [5]
- b) With a schematic explain deep drawing operation. [5]
- c) Explain in detail various challenges in forming process. [5]

OR

- Q2)** a) Explain why in a deep drawing % reduction at first stage is limited to maximum to 50%. [5]
- b) Explain in detail, the effect of friction in forming operation. [5]
- c) State and classify the bulk deformation & sheet metal working processes. [5]
- Q3)** a) Explain with sketch, working of Laser beam forming. [5]
- b) With a schematic explain Stretch forming operation. [5]
- c) Explain in detail HERF (Explosive Forming) techniques. [5]

OR

- Q4)** a) Explain in detail Incremental Sheet forming process with neat sketch. [5]
- b) Explain with suitable diagram the Magnetic Pulse Forming process. [5]
- c) Explain with suitable diagram working of Electro Hydraulic Forming processes. [5]

