

Total No. of Questions : 6]

SEAT No. :

P1559

[Total No. of Pages : 1

BE/Insem/APR-173
B.E. (Mechanical Engineering)
ADVANCED MANUFACTURING PROCESSES
(2015 Pattern) (Semester - I) (Elective - IV)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*

- Q1)** a) List the types of explosive forming processes. Explain the working of unconfined explosive forming process with neat sketch? [6]
b) Draw sketch of electromagnetic forming and writes its applications. [4]

OR

- Q2)** a) Explain the factor affecting spinning process with neat sketch also list the application of shear spinning? [6]
b) Explain working principle of High Energy Rate forming with sketch? [4]

- Q3)** a) Explain working of friction stir welding process with various temperature zones. [6]
b) Explain the process parameter of Electron Beam welding process. [4]

OR

- Q4)** a) Explain working of Laser beam welding process with neat sketch. [6]
b) What are the various challenges in underwater welding process? [4]

- Q5)** a) Explain working of Abrasive flow finishing process with neat sketch. [6]
b) Write short note on safety precautions in Laser based Heat Treatment. [4]

OR

- Q6)** a) Explain working principle of Electrochemical discharge Machining with neat sketch. [6]
b) Explain the basic principle of Electrolytic machining. [4]

