

Printed Pages : 2



EME012

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 140652

Roll No.

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B. Tech.

(SEM. VI) THEORY EXAMINATION, 2014-15
UNCONVENTIONAL MANUFACTURING PROCESSES

Time : 3 Hours]

[Total Marks : 100

Note : Attempt all questions as per instructions.**1** Attempt any **four** questions : **5×4=20**

- (a) What are the limitations of conventional processes?
- (b) Differentiate: Conventional processes and Unconventional processes .
- (c) What is the role of electrolyte in ECM process.
- (d) Classify various unconventional processes.
- (e) Write about objectives of unconventional processes.
- (f) What are the demerits of main unconventional processes.

2 Attempt any **two** questions : **10×2=20**

- (a) What is EDM process? Explain principle and working of EDM.
- (b) Explain the mechanism of MRR in ECM process.
- (c) What is AJM process? Explain the effect of stand-off distance and abrasive grit size on MRR in the AJM.

- 3** Attempt any **two** questions : **10×2=20**
- (a) Explain EBM process with a neat sketch. Also give its limitations and scope of applications.
 - (b) Giving a neat diagram explain the working of LBM process.
 - (c) Explain the principle and working of USM process.
- 4** Attempt any **two** questions : **10×2=20**
- (a) What is explosive welding process? Describe with field of applications.
 - (b) Explain PAW with neat sketch. Also give its limitations.
 - (c) Write short notes on metalizing and cladding.
- 5** Attempt any **two** questions : **10×2=20**
- (a) What is the principle and working of explosive forming?
 - (b) Explain water hammer forming with neat sketch.
 - (c) Describe the diffusion process in electronic device manufacturing.
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