



M.Tech I Semester Regular & Supplementary Examinations January/February 2019

ADVANCES IN MANUFACTURING TECHNOLOGY

(Common to CAD/CAM, PE&ED and PE)

(For students admitted in 2017 & 2018 only)

Time: 3 hours

Max. Marks: 60

Answer all the questions

- 1 Explain about thermal and mechanical coating processes with neat sketch.

OR

- 2 Explain about physical vapour deposition and chemical vapour deposition with neat sketch.

- 3 Describe the apparatus, process parameters, process capabilities and applications of abrasive jet machining.

OR

- 4 Explain the principle and working of ultrasonic machining process.

- 5 Describe the construction and working principle of EDM process. Write its advantages, disadvantages and applications. Also discuss the effect of process parameters on the metal removal in EDM.

OR

- 6 With the help of a diagram, explain the working of ECM process. Also write its advantages, disadvantages and applications.

- 7 Explain different types of plasma arc machining process with a neat sketch. Also state its advantages, disadvantages and applications.

OR

- 8 Explain the principles, machining system, process capabilities, applications and advantages of EBM with a neat sketch.

- 9 Explain the production of laser beam and working principle of LBM process.

OR

- 10 Explain the principle of LBM with neat sketch. Also discuss the effect of machining parameters on surface finish, applications and limitations.
