Exam.Code: 0942 Sub. Code: 7063

1019

B.E. (Mechanical Engineering) Sixth Semester

MEC_606: Non-Conventional Manufacturing

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:
 - a) What is the use of non-conventional machining processes?
 - b) State any two applications of water jet machining.
 - c) Write down process parameters of electrical discharge machining process.
 - d) Write down the name of electrolytes used in electrochemical machining process.
 - e) What is the function of dielectric used in electrical discharge machining? (5x2)

<u>UNIT – I</u>

- II. What is the working principle of ultrasonic machining process with diagram and give the advantages, disadvantages and its application. (10)
- III. What is the principle mechanism of material removal, characteristics and its applications? Explain the Hybrid machining. (10)
- Explain working principle of chemical machining process with its characteristics and applications.

UNIT - II

- V. Explain in detail electrochemical grinding process with its characteristics and neat sketch. (10)
- VI. Write short notes on Ion beam machining and Plasma are machining. (10)
- VII. Explain working principle of Laser beam machining and Electron beam machining with neat sketch. (10)