Subject: NON CONVENTIONAL MANUFACTURING Sub Code: 02 1617

L-T-P: 3-1-0 Credit: 4

1. Introduction: Limitation of conventional manufacturing processes, need of unconventional manufacturing process and its classification.

Lecture: 2

- 2. Unconventional machining process: Principle and working and applications of unconventional machining process such as electro discharge machining, electrochemical machining, ultrasonic machining, abrasive jet machining etc.

 Lecture: 12
- 3. Unconventional welding process: Principle and working and applications of unconventional welding processes such as laser beam welding, electron beam welding, ultrasonic welding, plasma arc welding.

 Lecture: 12
- 4. Explosive welding, cladding etc. under water welding, metallising. Lecture: 4
- 5. Unconventional forming processes, principle, working and applications of high energy forming processes such as explosive forming, electromagnetic forming, electro-discharge forming, water hammer forming, explosive compaction etc.

 Lecture: 12

Text Books:

- 1. Manufacturing Technology by P.N.Rao
- 2. Production Technology by R.K.Jain