SHEKHAWATI INSTITUTE OF ENGINEERING & TECHNOLOGY

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1st -MID TERM EXAMINATION 2018 (6th Semester -ME)

Subject Code & Name: 6ME2A (NMM)

MM: 20 Time: 1 :30Hr

Student Instructions

1. Use pencil for diagrams.
2. Answer should mark proper S No.
3. **Attempt ~~any~~ five question**

Q.1 Write down the difference between conventional and non conventional machining.

Q.2 Explain abrasive flow machining.

Q.3 Explain water jet machining.

Q.4 Explain the magnetic abrasive finishing.

Q.5 Explain ultrasonic machining.

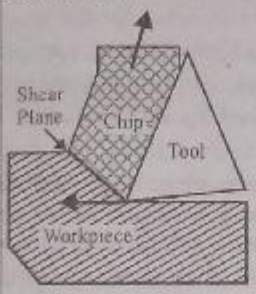
Q.6Explain electro discharge grinding.

Q.3 *Distinguish between conventional and unconventional manufacturing processes.* [R.T.U. 2015]

OR

What are the differences between conventional and unconventional machining methods? [R.T.U. 2014]

Ans. Conventional and unconventional machining methods

S. No.	Conventional Machining Process	Non-Conventional Machining Process
1.	Generally macroscopic chip formation by shear deformation. 	Material removal may occur with chip formation or even no chip formation may take place. For example in AJM, chips are of microscopic size and in case of electrochemical machining material removal occurs due to electrochemical dissolution at atomic level.
2.	There may be a physical tool present. For example a cutting tool in a lathe machine.	There may not be a physical tool present. For example in laser jet machining, machining is carried out by laser beam. However in electrochemical machining there is a physical tool that is very much required for machining.
3.	Cutting tool is harder than work piece at room temperature as well as under machining conditions.	There may not be a physical tool present. For example in laser jet machining, machining is carried out by laser beam. However in electrochemical machining there is a physical tool that is very much required for machining.