Reg. No.										

Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)

V SEMESTER B.TECH. (INDUSTRIAL AND PRODUCTION ENGINEERING)

DEGREE END SEM. (MAKE UP) EXAMINATIONS, DEC 2015/JAN 2016

SUBJECT: **ADVANCED MANUFACTURING TECHNOLOGY [MME 323]**

REVISED CREDIT SYSTEM

Time: 3 Hours MAX. MARKS: 50

Instructions to Candidates:

- Answer **ANY FIVE FULL** the questions.
- Missing data may be suitable assumed.

1A.	Distinguish clearly between Microfinishing and Grinding process	2
1B.	Explain with sketch Explosive Forming	4
1C.	Sketch and Explain Ultrasonic Machining	4
2A.	What do you mean by Super Finishing Process? What are its advantages over conventional machining?	2
2B.	Sketch and Explain Laser beam machining	4
2C.	Write short note on Thread rolling and Spline rolling	4
3A.	Write a note on “Elastomers”.	2
3B.	With a neat diagram, explain Casting process and Extrusion used to form plastics.	4
3C.	With the help of a neat line diagram, explain the Compression moulding and Reaction injection moulding process.	4
4A.	Distinguish clearly between WJM and AWJM	2
4B.	With a neat sketch, explain Electro Chemical Drilling process.	4
4C.	What are the advantages and limitations of RP?	4
5A.	What are the advantages and disadvantages of EDM process	2
5B.	What do you mean by sintering of green compact? Why do you go for sintering of metal compacts?	4
5C.	What do you mean by stereolithography (STL)? With a neat sketch, explain the process used for manufacturing the prototypes.	4
6A.	Write a note on Bio-degradable plastics.	2
6B.	What are the advantages, disadvantages and applications of powder metallurgy	4
6C.	Differentiate between Traditional and Non Traditional Machining process	4