

Registration No :

--	--	--	--	--	--	--	--	--	--

Total Number of Pages : 01

B.Tech
PEME5306

6th Semester Back Examination 2018-19
MODERN MANUFACTURING PROCESSES
BRANCH : MECH, PLASTIC

Time : 3 Hours

Max Marks : 70

Q.CODE : F132

Answer Question No.1 which is compulsory and any FIVE from the rest.
The figures in the right hand margin indicate marks.

- Q1 Answer the following questions : (2 x 10)**
- a) Why electrolyte is used in ECM?
 - b) In USM slurry is a mixture of which materials?
 - c) Write the function of tubing in WJM.
 - d) Electron gun in EBM is used for which purpose?.
 - e) Write the names of abrasives and carrier gasses used in AJM.
 - f) Explain the role of Maskants in chemical machining.
 - g) Name the equipment used in plasma arc spraying.
 - h) What is the function of servo-mechanism in EDM?
 - i) What is the concept of reverse engineering?
 - j) How PVD is different from CVD?
- Q2 a) Describe in detail about the different equipment used in water jet machining. (5)**
b) Describe with neat diagram the tool feed mechanism of an ultrasonic machine. (5)
- Q3 a) Explain the principle and mechanism of metal removal in LBM with neat diagram. (5)**
b) Discuss in detail the different parameters influence the performance of plasma arc machining process. (5)
- Q4 a) Explain the electro less forming process with diagram (5)**
b) Describe the micro and nano machining of glass. (5)
- Q5 a) Write the advantages and application of chemical machining process. (5)**
b) Discuss the factors influencing the choice of electrode material in EDM. (5)
- Q6 Explain the working principle and elements of electro-chemical machining process with neat diagram. (10)**
- Q7 Discuss in detail how different variables influence the material removal rate and accuracy of machining in AJM. (10)**
- Q8 Write short answer on any TWO : (5 x 2)**
- a) Concurrent engineering
 - b) Wire EDM.
 - c) Rapid prototyping.