

Roll No

MMIP - 105
M.E./M. Tech., I Semester
Examination, June 2016
Manufacturing Science
Time : Three Hours

Maximum Marks : 70

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. Write down names of materials and manufacturing process used in manufacture of
 - a) Piston for two wheelers
 - b) Electrical conductors
 - c) Plastic buckets
 - d) Crockery
 - e) Plain washers
2. Differentiate between hot working and cold working. A work piece made of mild steel is heated to 400°C and mechanical work is being done on it is it an example of "Hot working" or "Cold working"
3. Discuss the fundamental factors that affect the tool forces and hence the tool wear and tool performance in any machining operation.

4. Describe any tool life equation. On what basis the tool life criterion is based? And a HSS tool requires regrinding after 2 hours and 45 minutes when machining steel at a cutting speed of 35m/min. Calculate the tool life if the speed is increased to 70m/min.
5. Write short note on EDM, ECM, USM, AJM.
6. Draw figure and explain laser and plasma arc machining.
7. Explain with neat sketch the principle of working of blow moulding process. Also state its application.
8. Explain use of slip gauge and describe the measurement of cone angle of paper plug gauge by using sine bar.
