

2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

II B.TECH II SEMESTER REGULAR EXAMINATIONS

**MACHINE TOOL ENGINEERING
(PRODUCTION ENGINEERING)**

APRIL 2006

**TIME : 3 HOUR
MARK : 80**

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

1. (a) Discuss various types of cutting fluids.
(b) Explain about Machineability index.
2. Write short notes on the following
 - (a) Lathe carriage
 - (b) Cross slide
 - (c) Tool post
 - (d) Compound rest
3. What is Swiss automatic screw machine? How it functions and what are its main applications?
4. (a) How do you classify the different types of shapers?
(b) Explain with the help of a neat sketch, the working principle of a shaper.
5. (a) Write a brief note on the various work holding devices of a drilling machine
(b) Describe the following types of drills in brief
 - i. Core drill
 - ii. Multi diameter drill
 - iii. Chip breaker drill
6. (a) What are the differences between bed type and planar type milling machine.
(b) List the various precautions in use of milling cutters.
7. Write a short note on the following
 - (a) Brazed carbide tools
 - (b) Grade of grinding wheel
 - (c) Geometry of a single point turning tool
 - (d) Surface grinding machines
8. (a) What are the advantages and disadvantages of four locating points in a plane.
(b) Explain clearly how can be determined that the Jigs and fixtures for a particular application will be economical.