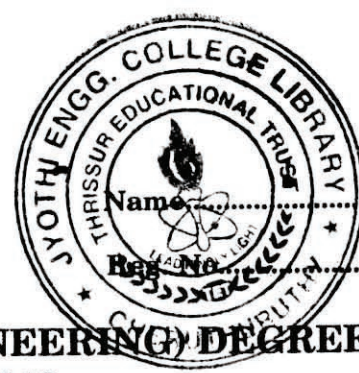


C 42713



**SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE  
EXAMINATION, MAY 2013**

ME 04 705 (B) – TOOL ENGINEERING AND DESIGN  
(2004 Admissions)

Time : Three Hours

Maximum : 100 Marks

**Part A**

*Answer all questions.*

- I. 1. What are the cutting parameters that influence the cutting force and power?  
2. Explain tool geometry of single point cutting tool.  
3. Differentiate between Compound and Progressive die.  
4. What are draw dies?  
5. List out the functions of a fixture.  
6. Explain 3-2-1 principle of location.  
7. Explain the functions of jig bushes.  
8. What are the important factors considered in drill jig design?

(8 × 5 = 40 marks)

**Part B**

- II. 9. Explain different types of tool holders and describe their design procedure.  
*Or*  
10. Describe the cutting power estimation in turning, drilling and milling.
- III. 11. Describe the methods to determine centre of pressure in a die and punch design?  
*Or*  
12. Explain the die design for simple components.
- IV. 13. Describe the working of pneumatic and hydraulic fixtures.  
*Or*  
14. Describe the design of fixtures for milling of simple components.
- V. 15. Explain the jig design for drilling and reaming.  
*Or*  
16. Describe the indexing process of jigs.

(4 × 15 = 60 marks)