DEC-2007

2007-CALICUT UNIVERSITY

B.TECH VII SEMESTER DEGREE EXAMINATION

TOOL ENGINEERING AND DESIGN

(MECHANICAL ENGINEERING)

TIME-3HOUR
MARKS-100

ANSWER FULL QUESTIONS

SECTION A 8*5=40 MARKS

1. Explain orthogonal cutting and oblique cutting.

2. What factors decide the cutting speed of a drill?

3. Differentiate between a compound die and a combination die.

4. What is mean by "clearance"? Why is it important in shearing operation?

5. What are the various location devices?

6. Enumerate the design principles of drilling jigs

7. Name the essential features of a milling fixture.

8. List the types of drill bushes.

SECTION B 4*15=60 MARKS

1. Sketch a plain milling cutter and explain the various elements of a cutter.

Or

2. Discuss the influence of cutting parameters on cutting force and power.

3. Sketch and design a die to manufacture cycle-chain links.

Or

4. Explain the design principles of progressive dies.

5. Sketch and explain standard work holding devices.

Or

6. Sketch and explain the operation of a quick acting clamps.

7. Discuss the different types of jigs.

Or

8.Sketch and explain on indexing jigs.