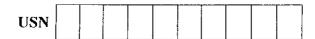
Mary.	Mangalore	06ME4



Time: 3 hrs.

Fourth Semester B.E. Degree Examination, June-July 2009

Manufacturing Process - II

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions form each Part – A and Part - B.

P	A	R	T	-	A

1	a.	With neat sketches, give nomenclature of a single point cutting tool.	(07 Marks)
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b. Derive the conditions $2\phi + \beta - \gamma = \frac{\pi}{2}$. Explain its significance with usual notations.

(07 Marks)

c. List various factors influencing tool – life. Explain any one of them. (06 Marks)

a. List various cutting tool materials in the increasing order of their hardness. (06 Marks)

b. Explain with the help of neat sketches, heat distribution at tool and workpiece. (06 Marks)

c. What are the methods of measurement of temperature of cutting tool tip? Explain any one of them. (08 Marks)

3 a. Differentiate between capstan and turret lathes. . (05 Marks)

b. With a neat sketch, explain any one of the driving mechanisms used in a shaping machine. (08 Marks)

c. Sketch a planning machine indicating major parts. Name any one of the mechanism for quick return movement in a planer. (07 Marks)

4 a. List various drilling machines. (05 Marks)

b. Draw neat sketch of a radial drilling machine indicating parts. (06 Marks)

c. Sketch and mention the application of the drilling machine operations – counter boring reaming and trepanning. (09 Marks)

PART - B

- 7 - A - With Skerches differentiate between up foliotic and down minimp obciations. About	5 a	With sketches, differentiate between up milling and d	down milling operations.	(06 Marks)
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b. Draw a neat sketch to show major parts of a horizontal milling machine. (08 Marks)

c. What is Indexing? Explain compound indexing. (06 Marks)

6 a. List various grinding wheel abrasives and bonding processes. (07 Marks)

b. Sketch a centre type – cylindrical grinding machine indicating parts. (08 Marks)

c. Differentiate between horizontal and vertical grinding machines. (05 Marks)

7 a. Sketch and explain vertical lapping machine. (08 Marks)

b. Name the parts along with a neat sketch of a tool head for honing of holes. (07 Marks)

c. List the uses of lapping process. (05 Marks)

8 a. Mention any five non – traditional machining processes. (05 Marks)

b. Explain AJM with a neat sketch. (10 Marks)

c. What are the applications of non traditional machining methods? (05 Marks)
