Reg. No.:

Question Paper Code: 34073

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Fourth Semester

Mechanical Engineering

01UME403 - MANUFACTURING TECHNOLOGY II

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions.

PART A -
$$(10 \times 2 = 20 \text{ Marks})$$

- 1. State the assumption made in Merchant Circle.
- 2. Mention the cutting fluids.
- 3. What is the main difference between live center and dead center?
- 4. State the various feed mechanism used for obtaining automatic feed.
- 5. What is the function of clapper block in a shaper?
- 6. State the differences between a vertical shaper and slotters.
- 7. Give some limitations of gear hobbing process.
- 8. Define lapping
- 9. Give some motion statements in APT.
- 10. Classify NC Motion Control System?

PART - B (5 x
$$16 = 80 \text{ Marks}$$
)

11. (a) Explain the variables and factors affecting Machinability. (16)

	(b)	Derive an expression for the determination of shear angle in Orthogonal cutting.	metal (16)
12.	(a)	List the step by step procedure for preparing tool layout of turret and capstan la detail.	the in (16)
		Or	
	(b)	Explain the features and classification of multi spindle automatics.	(16)
13.	(a)	Sketch and explain the hydraulic drive of a horizontal shaper.	(16)
		Or	
	(b)	Briefly explain the different types of saving machines.	(16)
14.	(a)	Explain Honing & and Super finishing with neat sketch.	(16)
		Or	
	(b)	Briefly discuss about the different types of abrasives used in a grinding wheel.	(16)
15.	(a)	Explain the different components of NC Machine Tool.	(16)
		Or	
	(b)	Briefly explain with illustrations about the manual part programming?	(16)