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Code: 15ME-437	[
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Number				

## IV Semester Diploma Examination, April/May-2017

## MACHINE TOOL TECHNOLOGY

Time: 3 Hours	[ Max. Marks : 100
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**Note:** Answer any SIX from Part - A and any SEVEN questions from Part - B.

PART - A (Any SIX questions to be answered) State the important characteristics of cutting tool materials. 1. BETA CONSOLE! Diploma - [All Branches] List the specifications of centre lathe. 2. Write the advantages of turret lathe over capstan lathe. 5 3. Diploma Question Papers [2015-List the various operations performed in a slotting machine. 5 4. 5 5. Differentiate between Shaper and Planer. State the importance of Jigs and Fixtures. 5 6. 7. Write the difference between upmilling and down milling. 5 8. List the advantages of centerless grinding over surface grinding. 5

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Sketch and explain electric discharge machining.

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-	PART – B	
•	(Any SEVEN questions to be answered)	
10.	Sketch and explain the Geometry of single point cutting tool.	10
11.	Explain the functions of following lathe accessories?	10
	(a) Four Jaw chuck	
	(b) Mandrel	
	(c) Face plate	
	(d) Steady rest	
12.	Write the different methods of taper turning. Explain taper turning by ta over method by using suitable sketch.	ilstock set 10
13.	With the neat sketch explain the working of planer.	BETA CONSOLE!
14.	Sketch and explain the Hydraulic shaper mechanism.	Diploma - [All Branches
15.	Explain with a neat sketch the working of radial drilling machine.	Beta Console Education  10
16.	With the line diagram explain following milling operation.	10
	(a) Form milling	Diploma Question Papers [2015 19]
	(b) Gang milling	Beta Console Education
	(c) Plain milling	,
	(d) Angular milling	
17.	With a neat sketch explain column and knee type milling machine.	10
18.	Explain the following surface finishing operations:	10
	(a) Honing	•
	(b) Lapping	
	(c) Super finishing	
	(d) Polishing	
19.	Sketch and explain ultrasonic machining.	. 10
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