

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III (NEW) EXAMINATION – SUMMER 2019

Subject Code: 2132501

Date: 04/06/2019

Subject Name: Machining Processes

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Explain basic concept of machining and machine tool.	03
	(b) Classification of machine tools.	04
	(c) Explain geometry of single point cutting tool with different angles.	07
Q.2	(a) Classification of lathe machine.	03
	(b) Explain the function of lathe machine and draw the relative motion between work piece and cutting tool with neat sketch.	04
	(c) List out the various cutting operations carried out in the lathe machine. Explain any two operations of them with sketch.	07
OR		
	(c) Difference between engine lathe and turret lathe.	07
Q.3	(a) Enlist different types of Drilling operation and explain any one operation with figure.	03
	(b) Explain function of grinding machine. Draw the relative motion between cutting tool and work piece.	04
	(c) Explain material removal rate and time calculation of drilling machine.	07
OR		
Q.3	(a) Enlist different types of drilling machine,	03
	(b) Explain trueing and dressing grinding wheel.	04
	(c) Difference between gang drilling machine and multi spindle drilling machine.	07
Q.4	(a) Explain different types of milling cutter.	03
	(b) Explain various types of bond in the grinding wheel in detail.	04
	(c) Classify the milling machines and explain the part of column & knee type-milling machine with neat sketch.	07

OR

- Q.4** (a) Explain different milling attachment. **03**
(b) Write short note on standard marking system of grinding wheel. **04**
(c) Different between conventional milling and climb milling operation with neat sketch. **07**

- Q.5** (a) State the comparison between shaper and planer machine. **03**
(b) Describe operation principal of broaching with figure and its application. **04**
(c) Explain drive mechanism for slotter machine **07**

OR

- Q.5** (a) Explain the function of planer machine and draw their relative motion. **03**
(b) Discuss various broaching methods with neat sketch **04**
(c) Can slotter be used as vertical shaper? Justify your opinion. Explain operation performed on slotter with neat sketch. **07**
