Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGINEERING - SEMESTER -III • EXAMINATION - WINTER-2015

Subject Code: 3335502	Date: 17	/12 /2015
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Subject Name: MECHANICAL TECHNOLOGY

Time: 10:30 AM TO 01:00 PM Total Marks: 70

Instructions:

- 1. Attempt any five questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- 4. Each question carry equal marks (14 marks)

Q.1	(a) (b)	Define the term 'machine tools'. List different basic machine tool used in general engineering workshop and explain any one. Draw neat sketch of lathe & write types of lathe	07 07
Q.2	(a) (b)	List different lathe accessories and explain any three with neat sketch. A Work piece 1250mm long has a taper 1 in 100 for a length of 500mm. The maximum dia.=75mm.calculate (1) The Minimum Diameter (2) The Amount Of Set Over OR	07 07
	(b)	Explain single point cutting tool geometry with neat sketch.	07
Q.3	(a) (b)	Explain radial drilling machine with neat sketch. Draw block diagram of shaper machine & label its parts. Explain specification of a shaper.	07 07
		OR	
Q.3	(a)	List different operations performed on drilling machine and explain any five with neat sketch.	07
	(b)	Draw block diagram of planner machine & label its parts.	07
Q.4	(a) (b)	Explain principle of milling machine with neat sketch Explain principle of grinding with neat sketch. OR	07 07
Q. 4	(a) (b)	List different milling operation and explain any five with neat sketch Explain marking system of grinding wheel in chart form	07 07
Q.5	(a) (b)	Explain different steps involved in making a casting Compare Hot Working & Cold Working Process. OR	07 07
Q.5	(a)	Explain different pattern allowance	07
	(b)	Explain the process of spinning process with neat sketch.	07
