

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER –III • EXAMINATION – WINTER-2015

Subject Code: 3335502**Date: 17 /12 /2015****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) Define the term 'machine tools'. List different basic machine tool used in general engineering workshop and explain any one. **07**
(b) Draw neat sketch of lathe & write types of lathe **07**
- Q.2** (a) List different lathe accessories and explain any three with neat sketch. **07**
(b) A Work piece 1250mm long has a taper 1 in 100 for a length of 500mm. The maximum dia.=75mm. calculate **07**
(1) The Minimum Diameter (2) The Amount Of Set Over
OR
(b) Explain single point cutting tool geometry with neat sketch. **07**
- Q.3** (a) Explain radial drilling machine with neat sketch. **07**
(b) Draw block diagram of shaper machine & label its parts. Explain specification of a shaper. **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) Explain principle of milling machine with neat sketch **07**
(b) Explain principle of grinding with neat sketch. **07**
OR
- Q.4** (a) List different milling operation and explain any five with neat sketch **07**
(b) Explain marking system of grinding wheel in chart form **07**
- Q.5** (a) Explain different steps involved in making a casting **07**
(b) Compare Hot Working & Cold Working Process. **07**
OR
- Q.5** (a) Explain different pattern allowance **07**
(b) Explain the process of spinning process with neat sketch. **07**
