

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Semester -III Remedial Examination April - 2010

Subject code: 335501

Subject Name: Mechanical Technology

Date: 20 / 04 / 2010

Time: 03.00 pm – 05.30 pm

Total Marks: 70

Instructions:

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

- Q.1** (a) Explain need of attitude, Knowledge & skill required for shop floor supervisor in machine tool industries **14**
(b) Explain orthogonal & oblique cutting
- Q.2** (a) Explain construction & working of lathe with neat sketch **07**
(b) List lathe operation. Explain any four with neat sketch. **07**
- OR**
- (b) List Lathe accessories & attachment. Explain any three accessories and three attachments. **07**
- Q.3** (a) List different operations performed on drilling machine. Explain any four operations with neat sketch. **07**
(b) Explain Construction & working of shaper with neat sketch. **07**
- OR**
- Q.3** (a) List different types of milling machine and explain working of any one with neat sketch. **07**
(b) Explain following milling methods with neat sketch **07**
1. Peripheral milling
2. Face filling
3. Up milling
4. Down milling
- Q.4** (a) Explain in detail centre less grinder and three methods of feeding work piece with neat sketch. **07**
(b) Explain different grinding wheel abrasives. **07**
- OR**
- Q. 4** (a) Describe sequential steps of casting process giving suitable example. **07**
(b) Explain advantages & application of metal casting over other methods of manufacturing. **07**
- Q.5** (a) What is core? Explain different types of cores with neat sketch. **07**
(b) Write brief note on following with neat sketch and state its application. **07**
1. metal extrusion 2. metal rolling
- OR**
- Q.5** (a) Explain different defects observed in casting, its causes & remedies. **07**
(b) Compare hot working & cold working of metals. **07**
