

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM-III Examination-Dec.-2011

Subject code: 133405**Date: 24/12/2011****Subject Name: Manufacturing & Assembly Drawing****Time: 2.30 pm -5.00 pm****Total marks: 70****Instructions:**

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

- Q.1** (a) Draw the conventions for Spiral Spring, Spur Gear, Bearings & Abbreviation for Gray Cast Iron, Stainless Steel, Across Flats, Hydraulic, Indian Standard, Drawing, Cylinder, Centre line. **07**
- (b) Sketch the sectional front view & the top view of a double riveted lap joint with zig-zag arrangement. Take the thickness of the plates as 9 mm show at least two longitudinal pitch lengths. **07**

- Q.2** (a) Draw the symbols for Form Tolerances & Positional Tolerances. **07**
- (b) Explain about different types of fits. **07**

OR

- (b) Define the following terms with suitable sketches. **07**
- 1) Allowance 2) Bilateral Tolerance 3) Deviation 4) Clearance

- Q.3** (a) What are the different types of Keys? Explain about Sunk Key & Feather Key. **07**
- (b) Draw the Sectional front view (Assembly) of a cotter joint with sleeve, details of which are given in Fig 1 to 1:1 Scale. **07**

OR

- Q.3** Details of a Plummer Block are shown in Fig 2. Draw the Half Sectional front view of the bearing. **14**

- Q.4** Draw the part drawings of the Strap (Part No: 1) & Sheave (Part No: 2) from the assembly drawing of the eccentric Fig. 3. **14**

OR

- Q.4** Fig 4 shows the assembly drawing of the connecting rod. Draw the part drawings of the Rod (Part No: 3) & Cap (Part No: 6). **14**

- Q.5** The details of a Screw Jack are shown in Fig 5. Assemble the parts of the jack & draw the front view in section when the top face of the load bearing cup is raised to a height of 300 mm above the bearing surface of the body. **14**

OR

- Q.5** The parts of a Tailstock are shown in Fig 6. Draw the front view in section of the assembly. **14**





