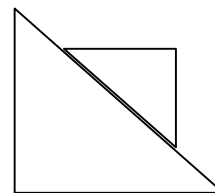
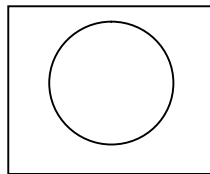


GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III • EXAMINATION – SUMMER 2013****Subject Code: 132001****Date: 29-05-2013****Subject Name: Industrial Drafting****Time: 02.30 pm - 05.30 pm****Total Marks: 70****Instructions:**

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

Q.1 (a) 07

- (a) Given below is the plan. Draw at least two possible elevations.
- (b) Given below is the elevation. Draw at least two possible plans.



- (b) Give classification of drawing. Differentiate between assembly drawing and part drawing. **07**

Q.2 (a) 07 Two equal size pipes, diameter 60 mm, main pipe vertical and branch pipe inclined at 30° to horizontal are connected with their axes intersecting. Draw the projections of connected pipes, when plane containing two axes is parallel to V.P.

- (b) What is prevention of rotation of bolt? Draw at least two different types of such bolts. **07**

OR

- (b) Draw the free hand sketch for the conventional representation of glass, concrete, splined shaft and bearing. **07**

Q.3 (a) 07 Draw neat freehand sketches in good proportions to indicate locking arrangement for a hexagonal nut using (i) lock nut (ii) split pin.

- (b) Differentiate between **07**
- (i) Permanent fasteners and Temporary fasteners
 - (ii) Internal threads and external threads

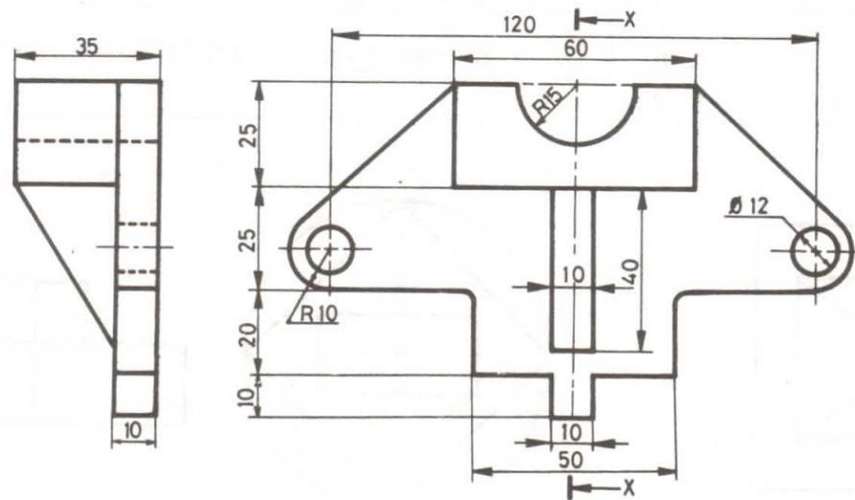
OR

Q.3 (a) 07 Sketch any two foundation bolts indicating necessary proportions taken.

- (b) Differentiate between **07**
- (i) Single start thread and multi start thread
 - (ii) Lead and pitch

Q.4 14 Draw according to first angle projection method:

- 1) Sectional side view taken along X-X.
- 2) Front view
- 3) Plan



OR

- Q.4** (a) Give classification of keys and draw free hand sketches of any three. 07
 (b) Prepare a dimensioned sketch of a sleeve cotter joint for rod diameter 25mm. 07

- Q.5** (a) Explain following terms: limits, tolerance, deviation 07
 (b) Explain hole based and shaft based system for fits. With the help of example explain different methods of placing limit dimensions. 07

OR

- Q.5** (a) Explain the advantages and disadvantages of a Computer Aided Drafting (CAD). 07
 (b) List the commands step by step used in context of Auto CAD to draw the following figure. 07

