INSTITUTION OF ENGINEERS, SRI PART I EXAMINATION – MARCH 2008

102 - PRESENTATION OF ENGINEERING INFORMATION - PART II

Time allowed: Three Hours Date: 05 April 2008

Before start answering the question paper, read the instructions given below and adhere to it.

- This question paper has only one question. Answer the question completely.
- Before answering the question, read and understand the question carefully.
- Sketch the solution on a blank paper before drawing it on the drawing sheet. If you wish, you could attach the sketch to your answer script.
- Candidate should attempt to project all views in the question simultaneously.
- Draw standard cage, title block, symbols, etc.
- It is extremely important that you write your Index No. at the relevant place on the drawing paper.
- All construction details, center lines, etc. should be visible.
- Marks will be deducted if the above instructions are not adhered to.

Question:

Student Bounty Com Figure given shows different components of a tool holder which is used the cutting tool of a lathe machine. The tool is tightened by set screws in the to holder. Four tools may be tightened at a time in this tool holder. Once loosened the clamp by operating the lever, the tool holder can be rotated relative to the base plate, while the four balls maintaining the contact between the tool holder and the base plate. Thereafter it can be re-clamped in any of the four positions, so that every tool may do the work. The different components illustrated in the figure are identified as below.

Item No.	Item Description
1	Base Plate
2	Tool Holder
3	Mover
4	Spring washer (04 numbers).
5	Knob
6	Handle
7	Stud
8	Groove screw (04 numbers)
9	Set Screw (04 Numbers)
10	Spring (04 numbers)
11	Spherical Steel Ball (04 numbers)

Assemble the tool post with the given components being placed at their correct positions, and draw to a scale of full size the following views in third angle projection.

- Sectional Front Elevation on B-B (a)
- End elevation projected to the right of the view (a) (b)
- Plan (c)

Print the main title "Tool Post," sub titles, and the scale, and give a minimum of five main dimensions in the drawing. Also indicate the symbol of projection.

