THE OPEN UNIVERSITY OF SRI LANKA

DIPLOMA IN TECHNOLOGY (LEVEL 03)

FINAL EXAMINATION – 2007
IN
ENGINEERING DRAWING – MEX 3234

CAREFULLY READ THE FOLLOWING INSTRUCTIONS BEFORE ATTEMPTING TO ANSWER THE QUESTION PAPER

1. Read carefully and understand the questions before you start answering
2. Clarify any doubts with the supervisor / invigilator in the examination hall.
3. Question in **SECTION A** is compulsory. Answer this question and one another question of your choice from **SECTION B.**
4. It is strongly advised to prepare a sketch of the solution on a rough paper, before drawing it on the drawing paper. If you wish, you could attach the sketch to your answer script.
5. Spend approximately three hours for question Q1 and rest of the time for the other question.
6. Use both sides of the drawing paper.
7. Draw the standard cage, title block, projection symbol etc. only for the question Q1. (Marks will be deducted if the title block is not properly placed)
8. All construction details, centerlines etc. should be clearly shown.
9. Candidate is strictly advised to write his/her index Number, Registration Number, and Course Code only. Do not write your name or any other information.

This paper contains four (04) pages

SECTION A
(Compulsory)

Q1.Fig. Q1 shows scattered view of different components of a **"CRANE HOOK"** in the first angle projection. Assemble the components in the correct position, and draw the following views to a scale of **FULL SIZE** in **FIRST** angle projection;

(a) Front elevation of the assembly. In this view of the assembly the hook and the plates should appear as they are in the front elevation in the question.

(b) Sectional end elevation on Y-Y projected to the right of view (a).

(c) Plan projected from view (a).

Adhere to the following instructions;

- Assume any missing dimensions.
- No hidden details are necessary.
- Give a minimum of six main dimensions.
- Indicate the symbol of projection.
- Print the main title, sub titles and scale;

   Note: With respect to end plate and hook, given views are front elevation with plan and front elevation with end elevation respectively.

SECTION B
(Answer only one question)

Q2.A cone and a cylinder shown in Fig Q2, have their <u>axes intersecting</u>. Draw their interpenetration curve in the given elevation and also the development of the cylinder.
(All dimensions are in mm)

Q3. Draw in isometric scale the isometric view of the object shown in Fig Q3, looking in the direction of the arrow shown. Do not show hidden details and do not dimension.
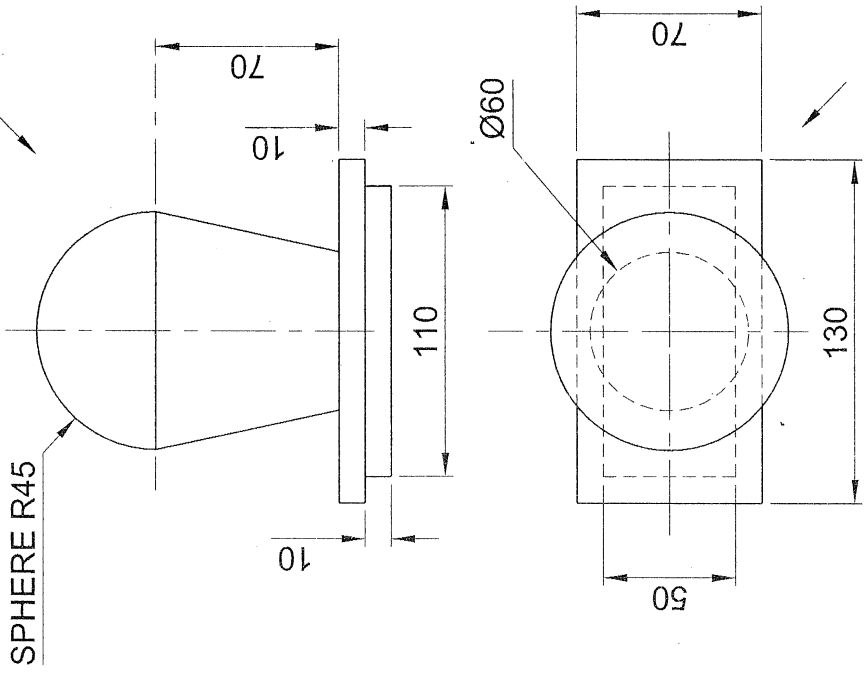(All dimensions are in mm)

SPHERE R45
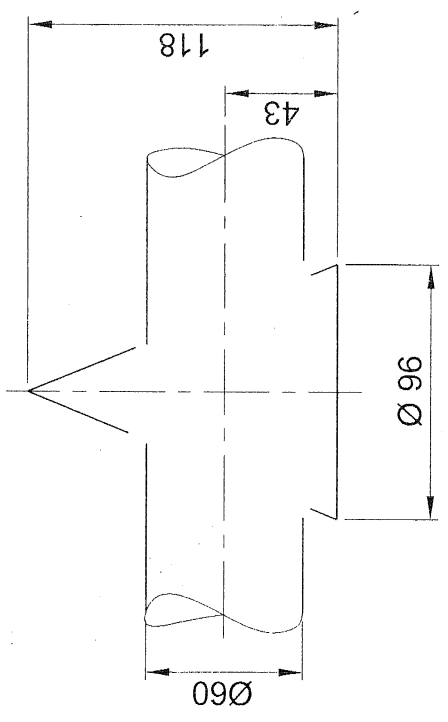
70

10

110

10

70

Ø60

130

50

FIG.Q3

118

43

Ø 96

Ø60

FIG. Q2