

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF INDUSTRIAL TECHNOLOGY

DEPARTMENT OF INDUSTRIAL AND MANUFACTURING ENGINEERING

ENGINEERING DRAWING I - TIE 1101

1ST SEMESTER EXAMINATIONS – FEBRUARY 2010

INSTRUCTIONS:

Time Allowed : 3 hours plus 15 minutes for title block preparations

1. Answer Question 1 and 2 and any other 2(two) Questions
2. Title block and margins carry 5 marks [5]
3. Draw carefully using appropriate line thicknesses. Show all construction lines used.
4. Note:- Produce a simple Title Block in the bottom right hand corner of your A3 Drawing Paper and print your Student Number, Department, Subject name and Course code. Print your student number only on the rest of your answer sheets.

QUESTION 1

Fig Q1 shows a pictorial drawing of a locating Bracket.

Draw full size in Third Angle Orthographic projection the following views

- (a) A Sectional Front elevation as seen on cutting plane B-B
- (b) End Elevation as seen from the left.
- (c) A Plan projected from the front elevation. [30]

QUESTION 2

Two views of a machine block are shown, in FIG Q2. Draw an Isometric view of the block so that corner S becomes the lowest point. [25]

QUESTION 3

Construct the cam shown in Fig Q3 using the concentric circle method for the Elliptical part of the Cam. French curves can be used. [20]

QUESTION 4

A Pipe-Joint is made up of two pipes of equal diameter (50) forming a Tee-joint. Draw Front and End elevations and then draw the surface development of pipe A only. Space your view to accommodate the full development. [20]

QUESTION 5

Accurately draw and fully dimension the Support Bracker shown in Fig Q5. clearly show how centres are found as well as points of tangency. [20]

End of Exam