

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF INDUSTRIAL TECHNOLOGY
DEPARTMENT OF INDUSTRIAL AND MANUFACTURING ENGINEERING
ENGINEERING DRAWING 1 TIE 1101
SUPPLEMENTARY EXAMINATIONS - OCTOBER 2009

INSTRUCTIONS

TIME : 3 hours and 15 minutes for Title Block

Answer Question 1 and any other three Questions.

All dimensions are in millimeters

Title block and margins carry 5 marks

Draw carefully using appropriate line thickness. Show all construction lines used.

Note: Produce a simple Title Block in the bottom left-hand corner of your A3 Drawing Paper and print your Student Number, Department, Subject Name and Number. Print your Student Number Only on the rest of your answer sheets.

QUESTION 1

Draw full size in first angle orthographic projection the following views of the clamp shown in fig Q1.

- a) Sectional Front View seen along cutting plane T-T
- b) End elevation in direction of arrow S
- c) A plan projected from view (a) [35]

QUESTION 2

Draw the two views of a Truncated Hexagonal Prism Shown in Fig Q2 and draw the development to include the Base and Top. [20]

QUESTION 3

On a common base of length 60mm.

- a) Draw a regular Pentagon and an Octagon. Clearly show all your construction lines [20]
- b) Using the Four-centre method draw an Ellipse using a Major axis = 120mm and a Minor axis = 80mm. Do not erase construction lines [10]

QUESTION 4

Accurately draw and fully dimension the Housing shown in Fig Q4. Clearly show how you get centers and tangent points used [20]

QUESTION 5

Two views of a Machine Part are shown in Fig Q5 in Third Angle orthographic projection. Draw the Machine Part in Isometric Projection with the length 200mm along the right base axis. [20]

END OF EXAM

