



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA,  
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION,  
DEPARTMENT OF INDUSTRIAL & TECHNOLOGY EDUCATION

FIRST SEMESTER 2022/2023 SESSION EXAMINATION

**COURSE CODE:** - ITE 572

**COURSE TITLE:** - MECHANICAL ENGINEERING DRAWING

**TIME ALLOWED:** - 2 Hours, 30 Minutes

**INSTRUCTION:** - *Attempt Question 1 and any other two. Use pencil throughout. Mark will be awarded for neatness, accuracy and good layout.*

- (1). FIG. 1. Shows a detail of Lever assembly in first angle projection, draw to scale of 1:1:
  - (a). Assembled front elevation of the arrangement,
  - (b). Sectional front elevation on the cutting plane A-A.
  - (c). Assembled plan of the arrangement.
- (2). A front elevation and plan of a regular hexagonal Prism are shown in FIG. 2. Project an auxiliary elevation on  $X^2Y^2$ .
- (3). Using scale 1:10 in FIG. 3. Find the interpenetration curve between the hopper and the rectangular trunking and develop the pattern for the hopper.
- (4). FIG. 4. Shows a detail of Y-shaped cylindrical pipe junction, using scale full size, draw:
  - (a). The given Y-shaped cylindrical pipe junction.
  - (b). The development of pipe 'A'.
- (5). A front elevation and plan of a Bearing Bracket is shown in FIG. 5. Draw to scale of 1:1:
  - (a). The given front elevation
  - (b). The section through plane A-A

GOOD LUCK