



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

FIRST SEMESTER 2021/2022 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 pulley assembly in first angle projection, draw to scale of 1:1:
 - (a). Assembled front elevation of the arrangement,
 - (b). Sectional front elevation of the pulley assembly.
 - (c). Assembled end elevation of the arrangement in the direction of arrow "A"
- (2). A front elevation and plan of a frustum of a square pyramid are shown in FIG. 2. Project an auxiliary plan in the direction of arrow 'A'.
- (3). A plan and part elevation shown in FIG. 3. Represent a sheet metal pyramid with a regular hexagonal base intersected by a prism of square cross section. Draw to scale of full size:
 - (a). The given plan and complete elevation of the arrangement.
 - (b). The development of the outer sloping surface of the pyramid.
- (4). A front elevation and plan of a Bearing Mounting is shown in FIG. 4. Draw to scale of 1:2:
 - (a). The given front elevation
 - (b). section through plane A-A
- (5). FIG. 5. Shows the plan and incomplete elevation of the junction of a hollow square prism with a cylinder.
 - (a). Complete the elevation showing the curve of intersection properly constructed.
 - (b). Draw the development of outer surface of the square prism which is joined along the edge DE.

GOOD LUCK