



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2022/2023 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER EXAMINATIONS

FOR THE DEGREE OF

BACHELOR OF TECHNOLOGY EDUCATION (MECHANICAL)

COURSE CODE: TEM 262

COURSE TITLE: TECHNICAL DRAWING III

DATE: 13/04/2023

TIME: 8.00- 11.00AM

INSTRUCTIONS

- Attempt questions 1, 2 and any other **one** question.
- All dimensions are in mm unless otherwise stated.

Time : 3 hours.

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Pages. Please Turn Over

QUESTION ONE

Parts and exploded view of VALVE MECHANISM are given in fig. Q1. Assemble the parts and to a scale of 2:1 draw the following views in first angle orthographic projection.

- i) Sectional Front elevation on cutting plane A-A
 - ii) End elevation
- Give five main dimensions.
Prepare the part list.

(45marks)

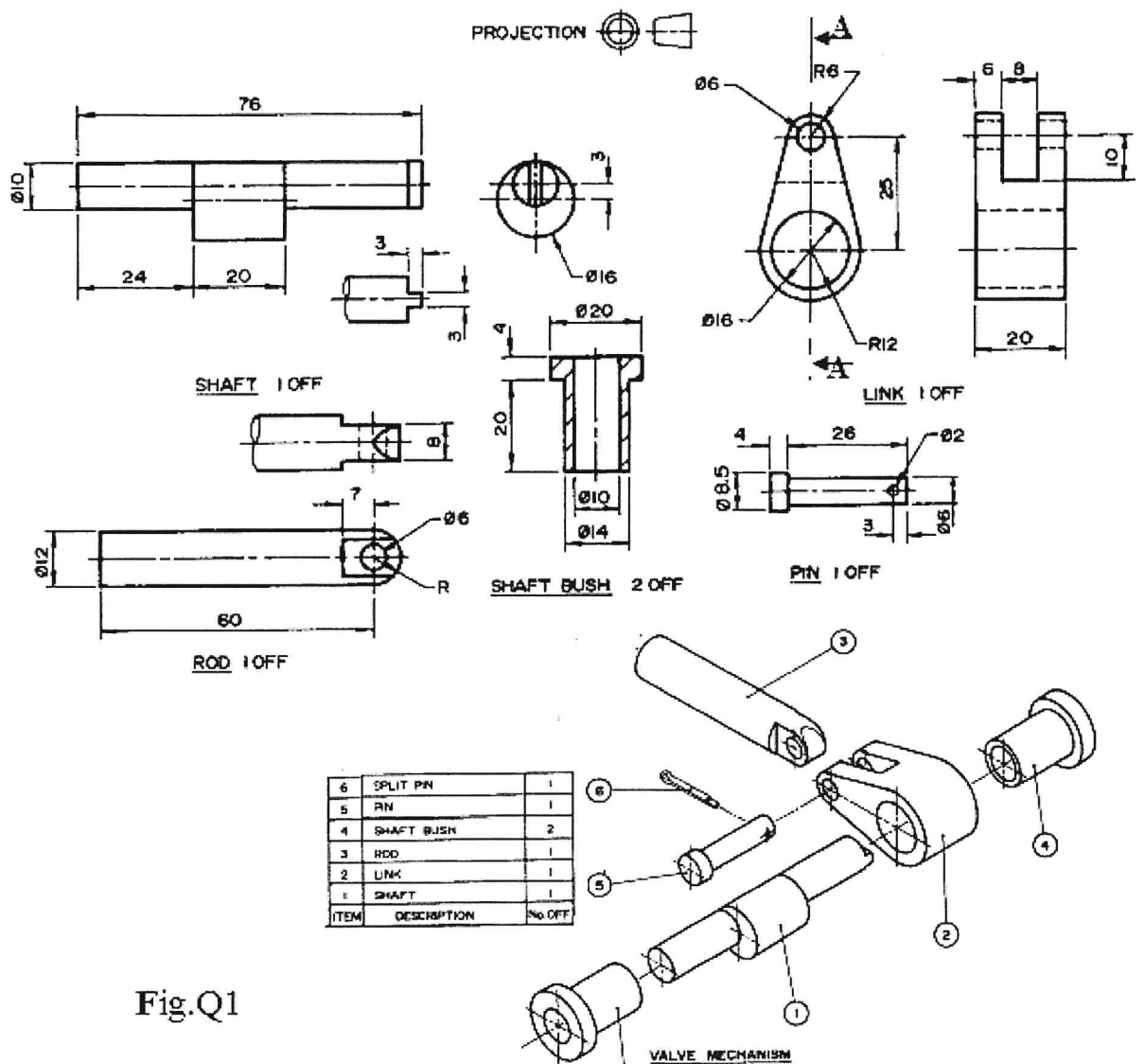
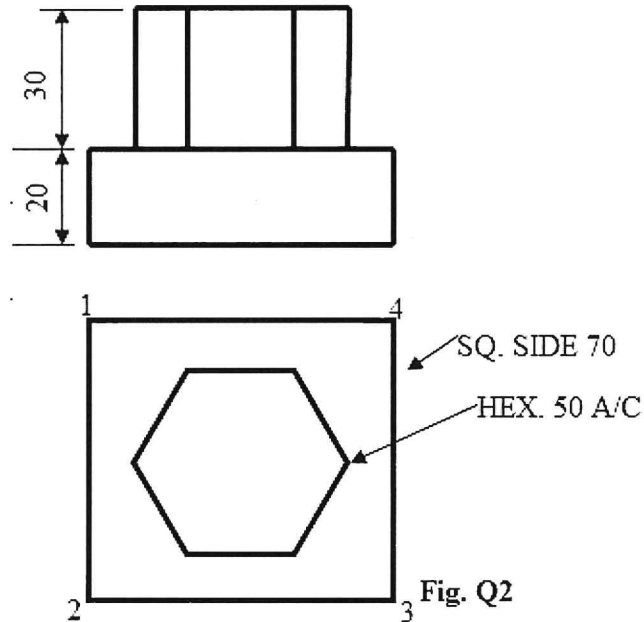


Fig.Q1

QUESTION TWO

Front and plan of a composite solid are shown in fig. Q2. Copy the views and then draw the projections of the solid if the solid is turned about base edge 4-3 so that the base is inclined at an angle of 30° to the horizontal plane and the same time the edge 1-4 is rotated anticlockwise so that it makes an angle of 30° to the vertical plane. (25 marks)



QUESTION THREE

- Differentiate between bolt and stud in respect to design and application. (4 marks)
- The following information relates to a surface to be produced in workshop.
 - To be produced by facing
 - Concentric circles lay
 - Waviness 0.05
 - Machining allowance 0.01

Represent this information on a drawing.

(6 marks)

QUESTION FOUR

The information regarding components to be produced in the workshop is given as 26H8k6.

- Describe the components
- Establish the resulting fit
- Give two typical applications of the established fit.

(10 marks)

