



*(University of Choice)*

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

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS  
2021/2022 ACADEMIC YEAR  
FIRST YEAR SECOND SEMESTER EXAMINATIONS**

**FOR THE DEGREE  
OF  
BACHELOR OF SCIENCE IN ELECTRICAL AND COMMUNICATION  
ENGINEERING**

**COURSE CODE: MIE 164**

**COURSE TITLE: ENGINEERING DRAWING II**

**DATE: 25/04/2022      TIME: 08:00 - 11:00 AM**

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**INSTRUCTIONS TO CANDIDATES**

Question ONE (1) is compulsory  
Answer Any Other TWO (2) questions

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 5 Printed Pages. Please Turn Over. ►

QUESTION ONE (COMPULSORY)

(40 Marks)

The parts detail drawing of a guided pulley assembly is drawn in first angle projection with some parts shown with front and end views in FIG Q1. Parts 1 and 5 have front and left end elevations while part 2 has front and right end elevation. You are required to assemble all the parts and draw the assembled sectional front view.

QUESTION TWO

(30 Marks)

Draw the isometric projection of a funnel consisting of a cylinder and a frustum of a cone as shown in FIG Q2. The diameter of the cylinder is 20 mm and the top diameter of the funnel is 68 mm. The heights of the frustum and cylinder are each equal to 40 mm

QUESTION THREE

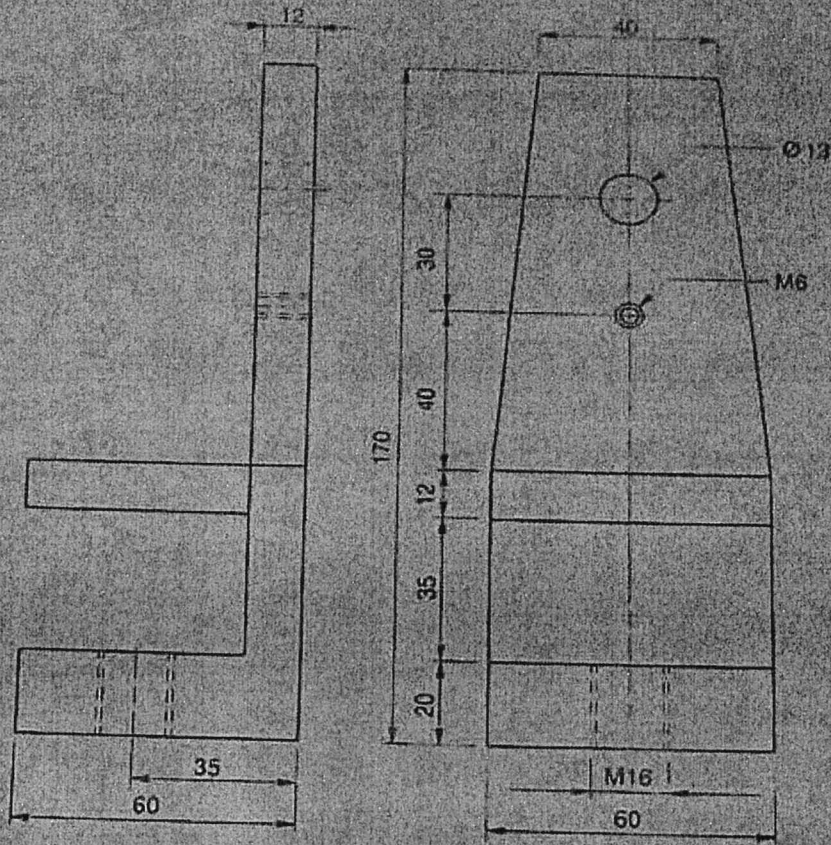
(30 Marks)

The top view of a transmission line is 65 mm long and is inclined at  $30^\circ$  to the reference ground. One end is 20 mm above HP and 10 mm in front of VP. The other end is 60 mm above HP and is in front of VP. Draw the projections and find the true length of the line and its true inclinations to HP and VP.

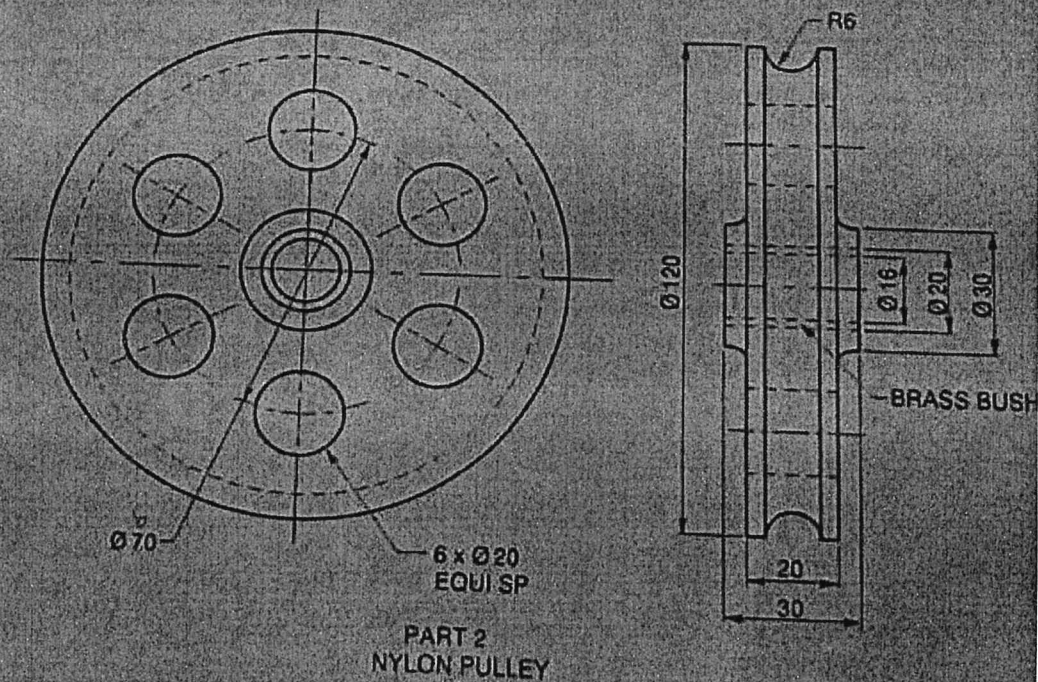
QUESTION FOUR

(30 Marks)

A rotor wheel of 50 mm diameter rolls on a straight line without slip. Trace the path of point on one of the spokes 10 mm from the rim towards the centre of the wheel for one complete revolution. Also draw a tangent and normal at any point on the path.



PART 1  
GUIDE BRACKET



PART 2  
NYLON PULLEY

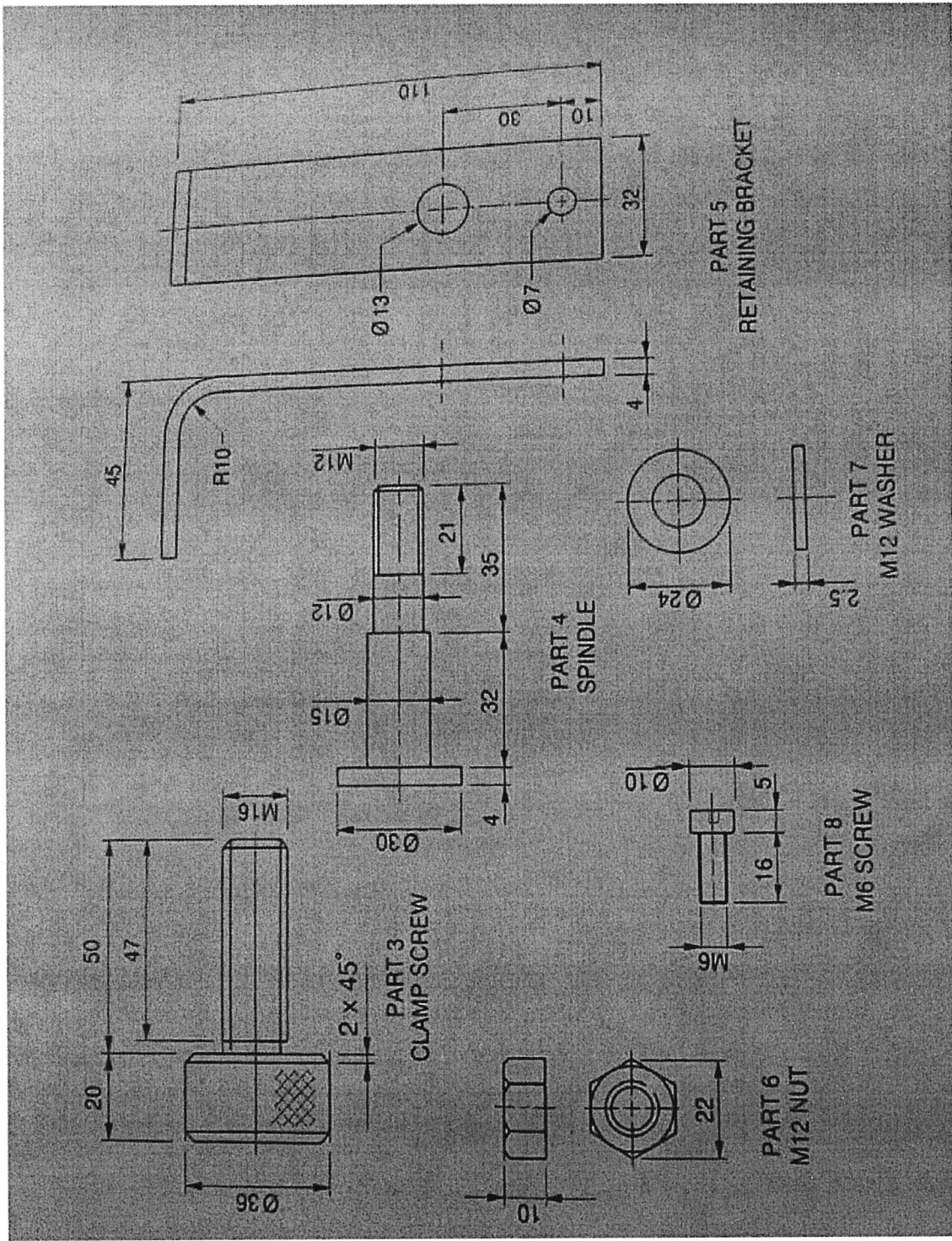


FIG Q1

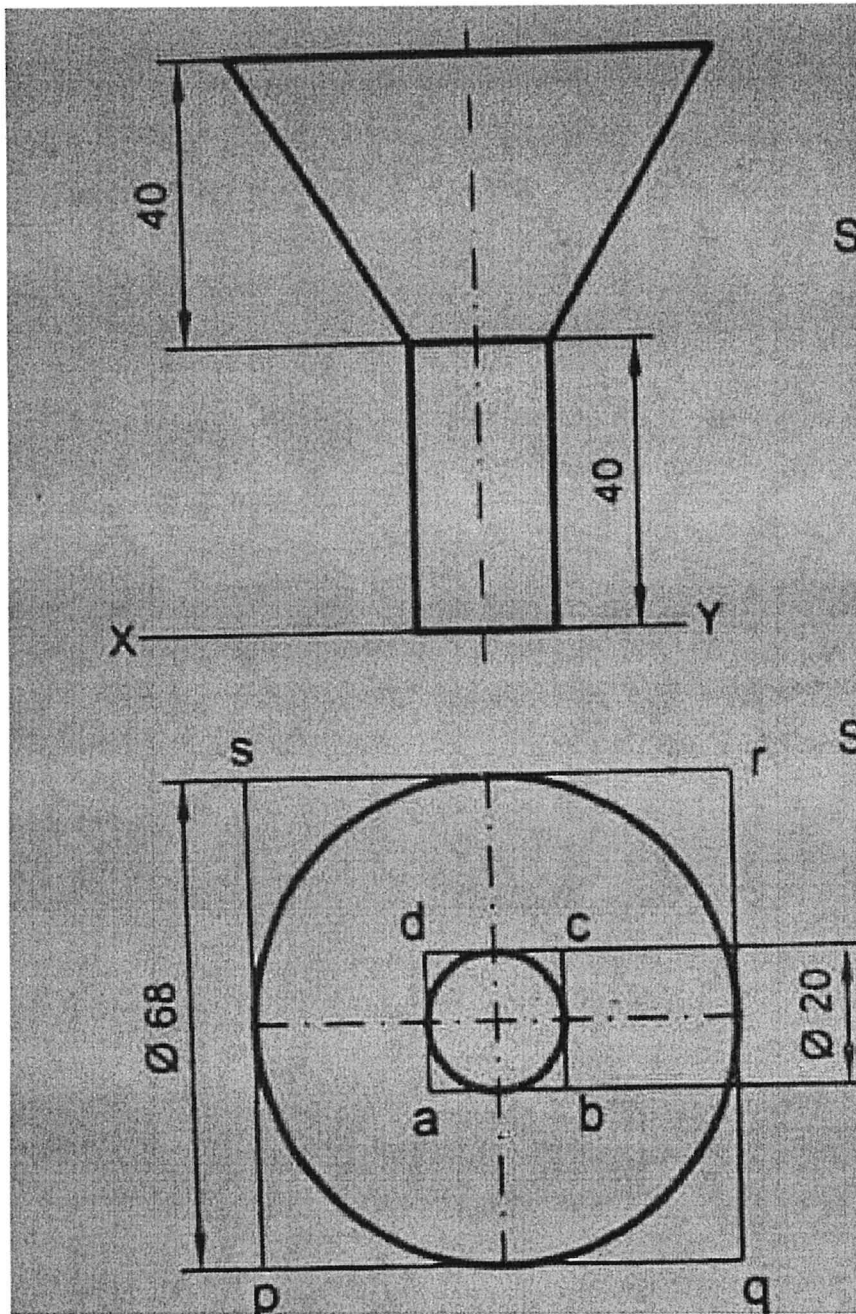


FIG Q 2

