## The Open University of Sri Lanka Faculty of Engineering Technology Department of Mechanical Engineering



018

Study Programme

: Bachelor of Technology Honours in Engineering

Name of the Examination

: Final Examination

Course Code and Title

: DMX4201 - Advanced Engineering Design

Graphics

Academic Year

: 2021/22

Date

: 8<sup>th</sup> February 2023

Time

: 13:30 - 16:30 hrs

Duration

: 3 hours

- 1. Read all instructions carefully before answering the questions.
- 2. This question paper consists of two (2) questions.
- 3. Answer all questions.
- 4. This is a Closed Book Test (CBT).
- 7. If you have any doubts, you may clarify from the Supervisor in you examination hall.
- 8. You are required to draw the standard cage for answers relating to orthographic projections.
- 9. You are required to save drawings periodically to prevent any losses due to technical problems.
- 10. Write down you index number in the cage instead of the name.
- 11. Drawings saved are considered the final submitted answer.
- 12. You may assume any missing dimensions.

## Question 01.

1. Generate the solid model of the object given in figure Q1 using AutoCAD software. Save the drawing as your registration number and 4201 Q1. (ex xxxxxxxxxx4201Q1)

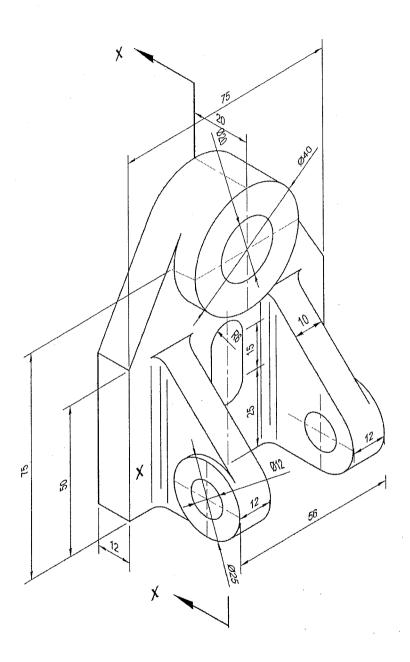


Figure Q1 - Bracket

## Question 02

An adjustable wall bracket is shown in figure Q2. The adjustable arm is connected to the bracket through a M8 bolt. Generate the sectional front elevation of the assembly on AA, end elevation projected to the right from the sectional view and plan to a scale of 1:1. You are required to draw the standard cage and fill all necessary details with dimensions. Save the drawing as your registration number and 4201 Q2. (ex xxxxxxxxxx4201Q2)

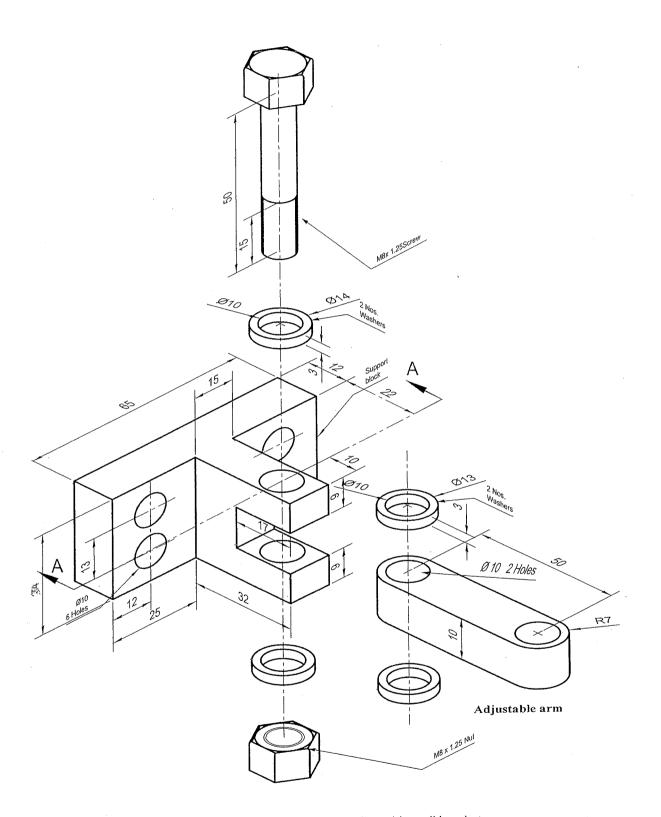


Figure Q2 –Adjustable wall bracket