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



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

:2019/2020

Date

:26<sup>th</sup> July 2020

Time

:9.30 hrs.-12.30 hrs.

Duration

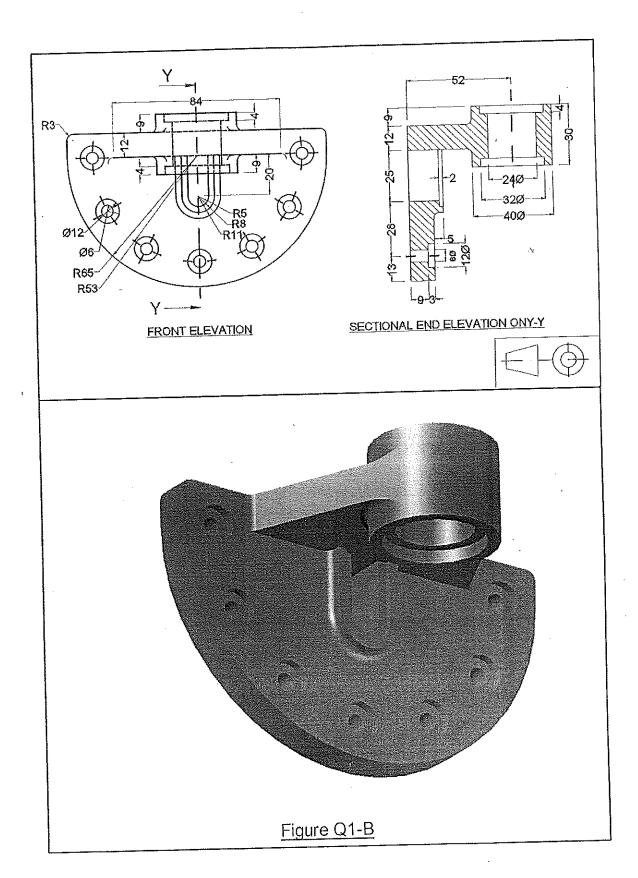
:3 hours

## **General Instructions**

- 1. Read all instructions carefully before answering the questions.
- 2. Clarify from the supervisor / Invigilator in your examination hall if you have any doubts.
- 3. Draw the standard cage and fill the title cage clearly for answers.
- 4. Save drawings periodically to prevent data loss.
- 5. Do not write your name.
- 6. Write down your index number in the title cage.
- 7. Save the answers as Question number followed by the registration number in the pen drive provided by the supervisor / invigilator [EX: Q2\_219233455].
- 8. Drawings saved in the pen drive are considered as the final answer.
- 9. Assume any missing dimensions.
- Q1. Construct the solid model of the object described by Figure Q1-A and Figure Q1-B.
- Q2. Figure Q2 shows the front elevation and the plan of an object in first angle projection. Draw the isometric view of the object taking the near points as shown by the arrows.
- Q3. As shown in **Figure Q3**, a right circular cylinder is cut by a cutting plane perpendicular to the vertical plane inclined at 35 degrees to the horizontal. Draw the development of the cylinder.

## Note:-

- All dimensions are in millimetres and the drawings are not in the actual scale.
- Radii of casting curves may be taken as 3 mm unless otherwise specified.
- Paper size and scale are to be selected according to your preference. Prepare the cage for the drawing accordingly.
- Marks are given for the approach, organization of the drawing, overall views, setting of dimension styles, titles and the Standard cage.



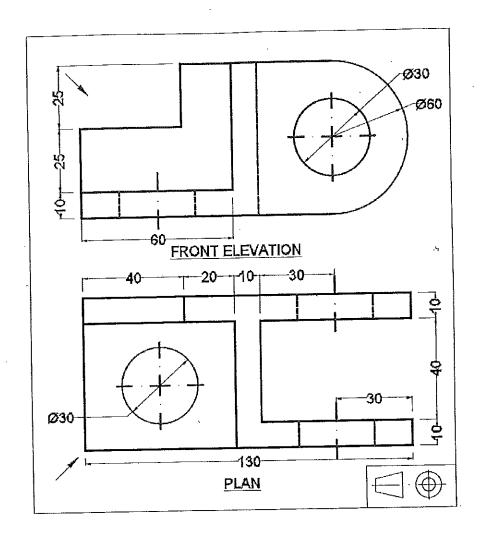


Figure Q2

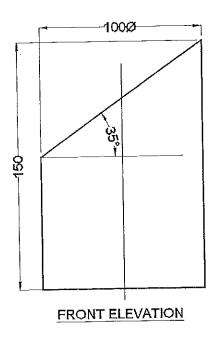


Figure Q3

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