

**OLLSCOIL NA hÉIREANN, GAILLIMH
NATIONAL UNIVERSITY OF IRELAND, GALWAY**

SUMMER EXAMINATIONS, 2000

FIRST ENGINEERING

**BIOMEDICAL, CIVIL, ELECTRONIC,
ELECTRONIC and COMPUTING, ENVIRONMENTAL,
INDUSTRIAL, MECHANICAL,
and UNDENOMINATED**

**ENGINEERING GRAPHICS
CE 101**

Paper I

Professor R. A. Falconer;
Professor P. E. O'Donoghue;
Dr. P. Ó hEachteirn.

Time allowed : *Two* hours

Answer *two* questions, including Question 1

Answer both questions **only** on a drawing sheet

Use **both** sides of the drawing sheet

Do **not** erase construction lines

Inked work is not required

1. Figure Q1 shows details of a **TOGGLE LEVER**. Using third angle projection, draw the following:
- (a) a front view,
 - (b) a top view, and
 - (c) a right side view.

Dimension fully.

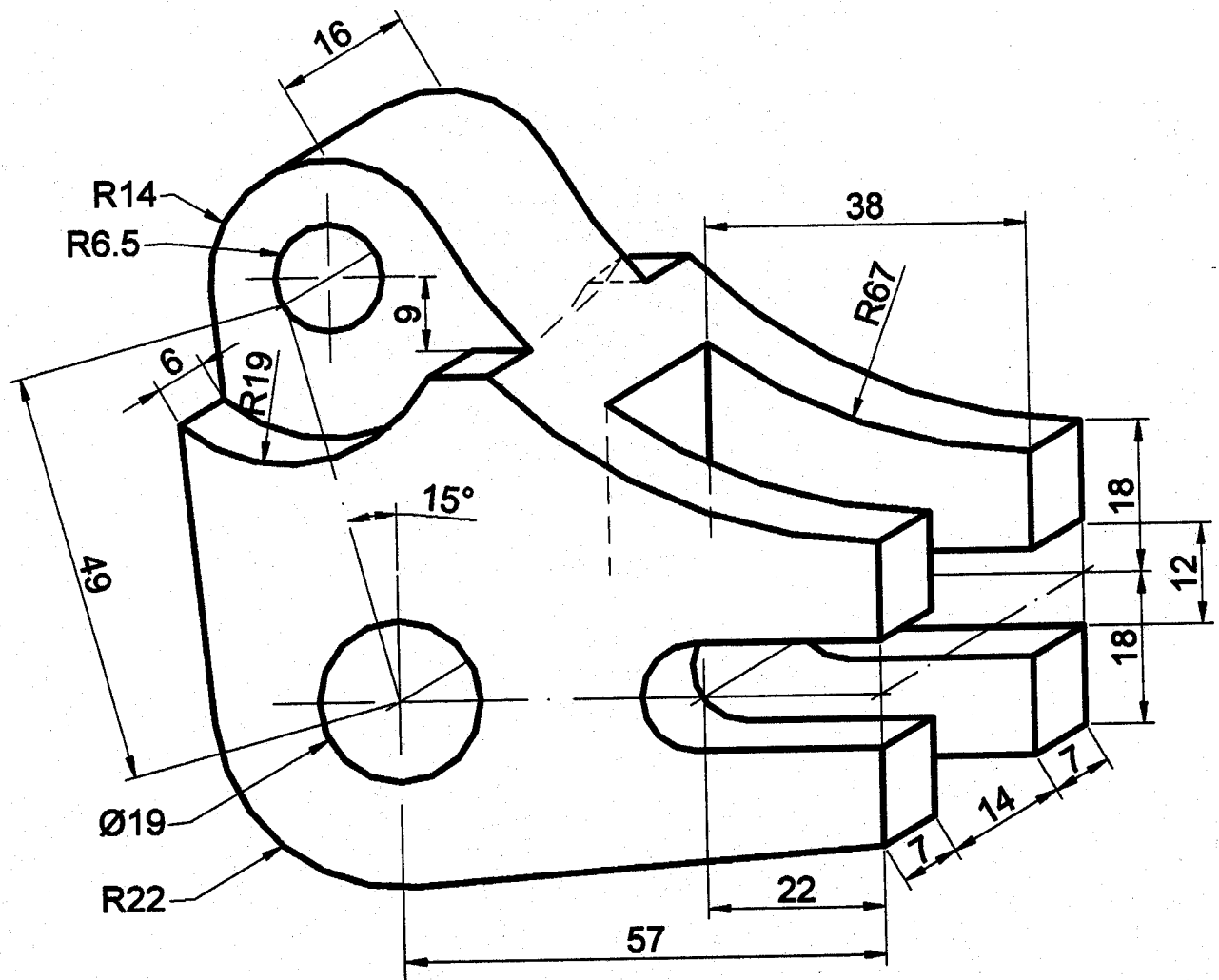


Figure Q1 TOGGLE LEVER

(30 marks)

2. Figure Q2 shows details of a **TORQUE-LIMITER WHEEL**. Make an oblique drawing showing the WHEEL in half-section, viewing it from above and from the left.

Dimension fully.

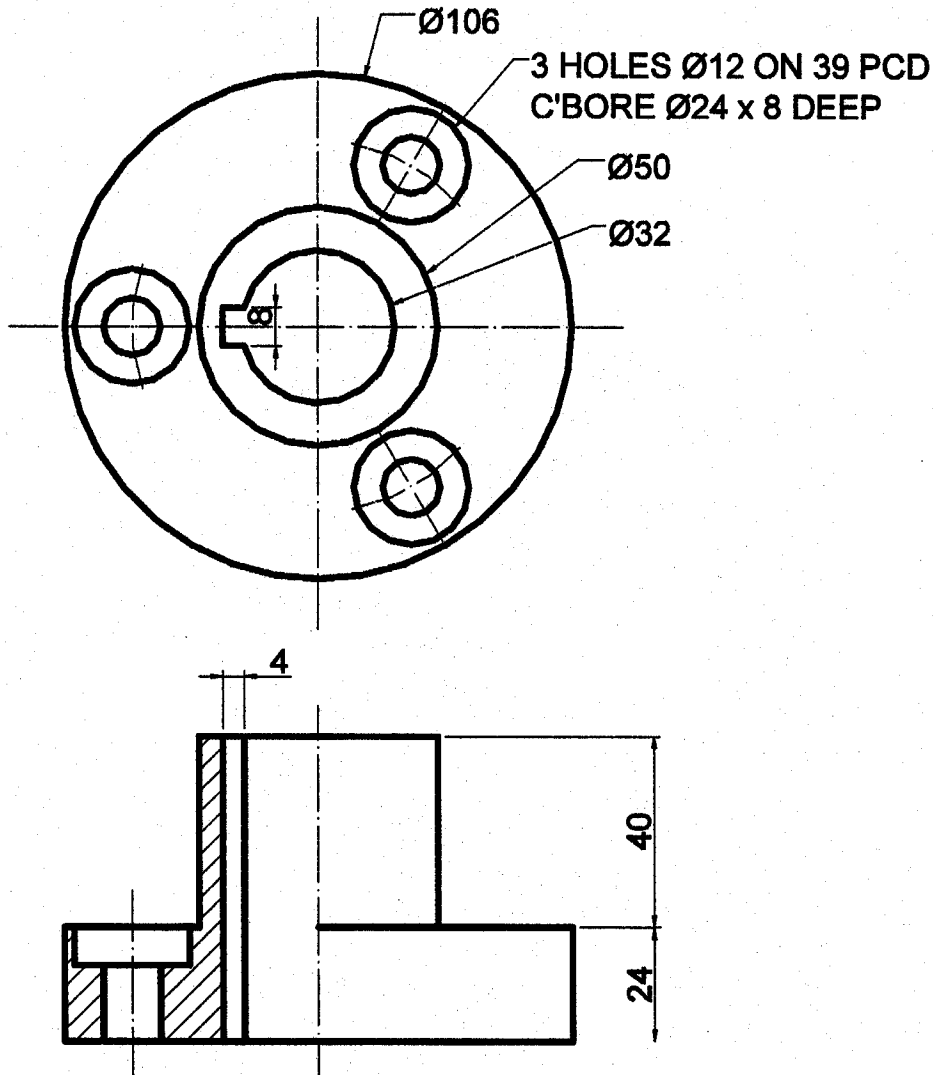


Figure Q2. TORQUE-LIMITER WHEEL

(20 marks)

3. Figure Q3 shows details of a **CONTROL BOX** in the shape of a truncated pyramid. Draw the following:
- (a) the given views of the **CONTROL BOX**,
 - (b) an auxiliary view of the inclined top surface (i.e., the lid) ,
 - (c) a development of the surface of the **CONTROL BOX**.

Dimension fully.

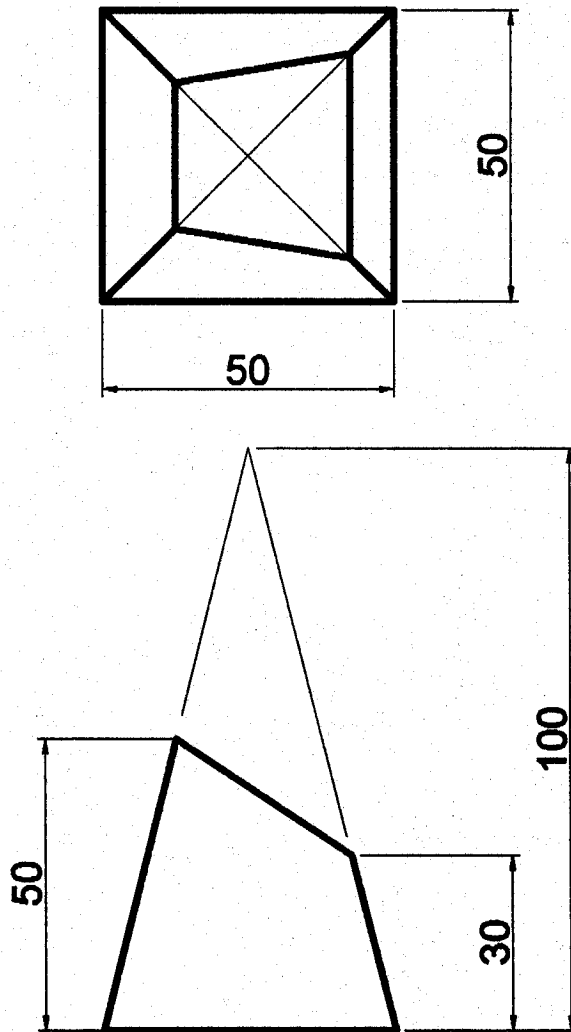


Figure Q3. CONTROL BOX

(20 marks)