GWANDA STATE UNIVERSITY

FACULTY OF ENGINEERING AND ENVIRONMENT

Engineering Drawing

EMI 1106

Final Examination Paper

January 2019

This examination paper consists of 6 pages

Time Allowed:	3 hours 15 minutes	*Question paper is approved*
Total Marks:	100	*In Its original format.*
Examiner's Name:	Mr Noel M Dewa	*V8L la 15/01/2019*

INSTRUCTIONS

1. Answer all questions in Section A and any two in Section B
2. All dimensions are in millimetres
3. This Examination Paper contains six (6) questions

Additional Requirements

A3 size drawing paper

MARK ALLOCATION

Section A	Carries a total of 60 marks
Section B	Each question carries 20 marks
Total Attainable	100

Section A

Question One

a) Print the following information in the bottom left corner of your A3 size Drawing Paper:
   i.   Student Number
   ii.   Your Department
   iii. Name of Subject
   iv.   Course Code

Do not print your Names   [5]

b) A Pictorial View of a Slide Block is shown in Figure Q1. Draw full size in First Angle Orthographic Projection the following views:
   i.   A Sectional Front View as seen on cutting plane B-B
   ii.   An End Elevation as seen from the right
   iii. A Plan projected from view (i)

Do not dimension.   [30]

Question Two

Figure Q2 shows details of a Slotted Block in Third Angle Orthographic Projection. Draw an Isometric View of the Slide Block with the longer of the base dimensions drawn along the right horizontal isometric axis.   [25]

Section B

Question Three

A fully dimensioned view of a Locking Plate is shown in Figure Q3. Draw the Locking Plate clearly showing all the construction lines used to find centres and touching points used. Do not erase any of the lines used.   [20]

Question Four

Three Views of a double Truncated Rectangular Prism are shown in Figure Q5 in First Angle Orthographic Projection. Draw the three views and go on to draw the Linear Surface Development of the Truncated Rectangular Prism to also include the top. (Do not include the base)   [20]

Question Five

A Swivel Bracket is shown in Figure Q5. Draw the Swivel Bracket clearly showing all the construction lines used to find centres and touching points.   [20]

Question Six

On a common Base AB = 66 mm, construct the following regular polygons:

a) Pentagon (5)   [10]
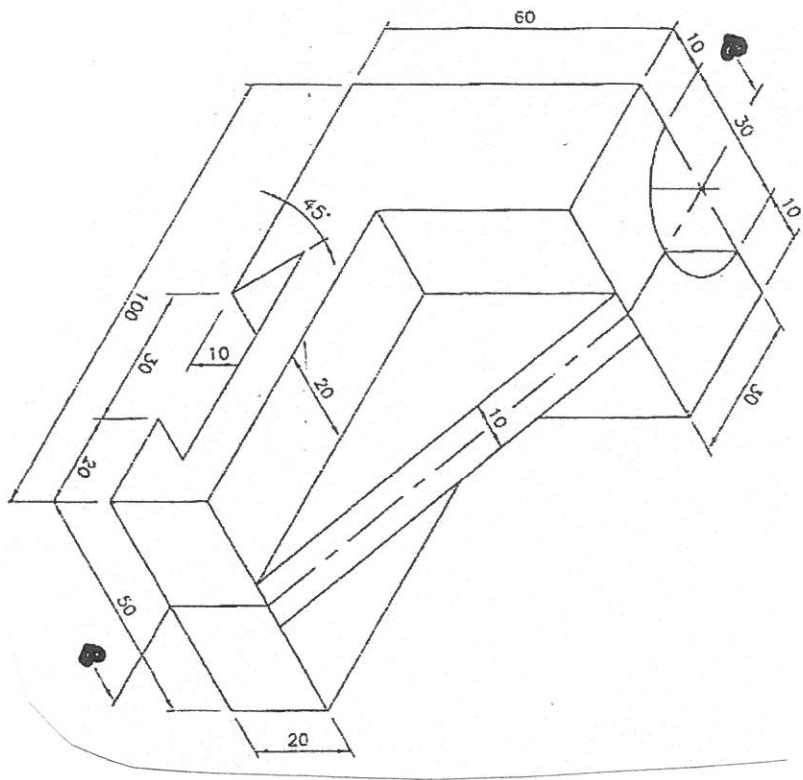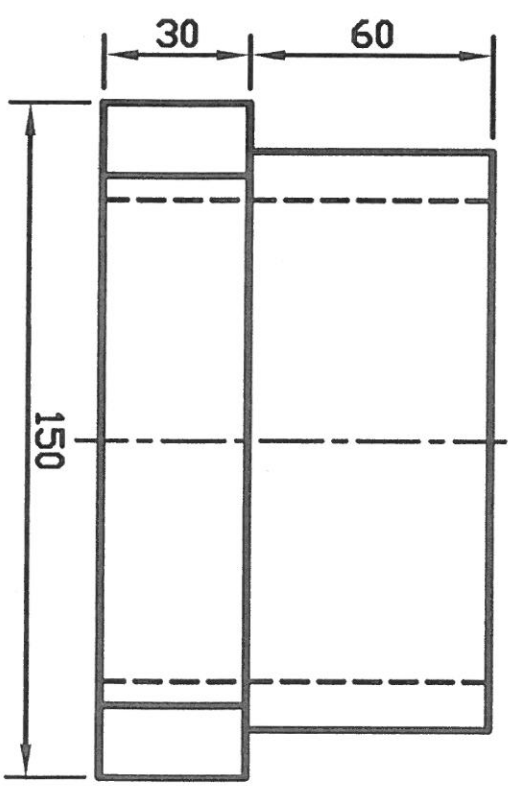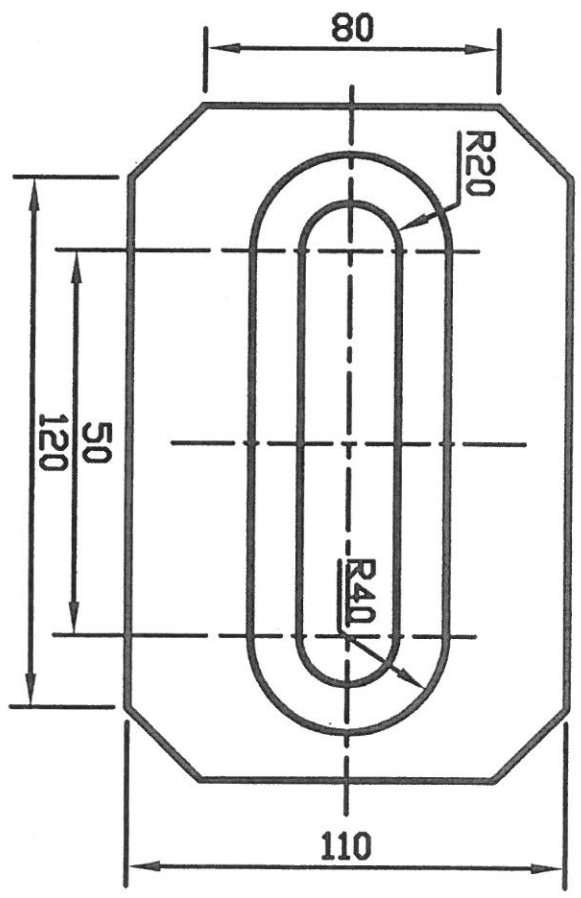b) Octagon (8)   [10]

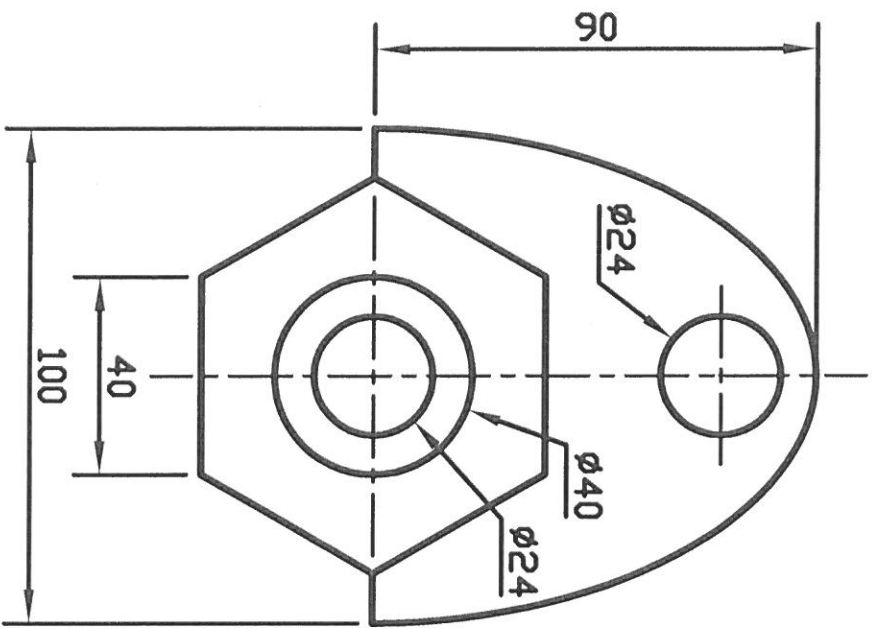### END OF EXAM

Figure Q1
Slide Block
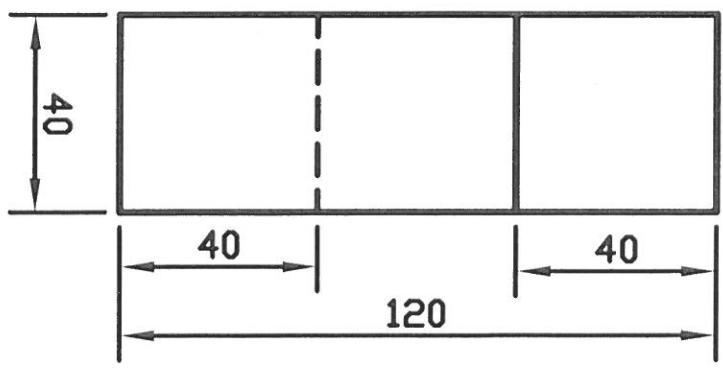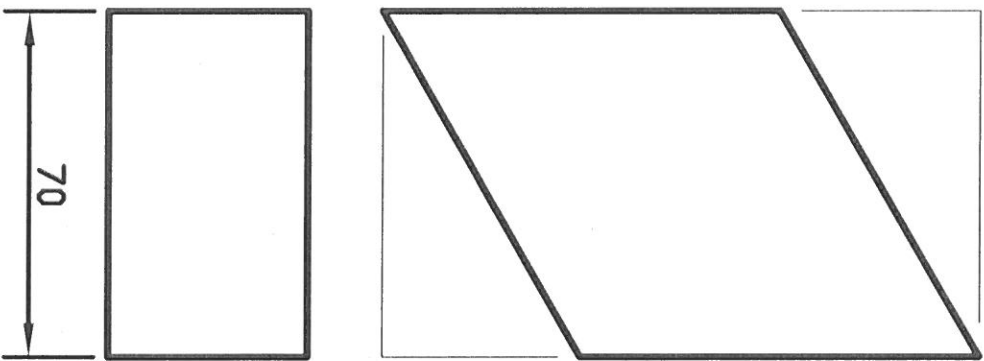

Figure Q2
Slotted Block
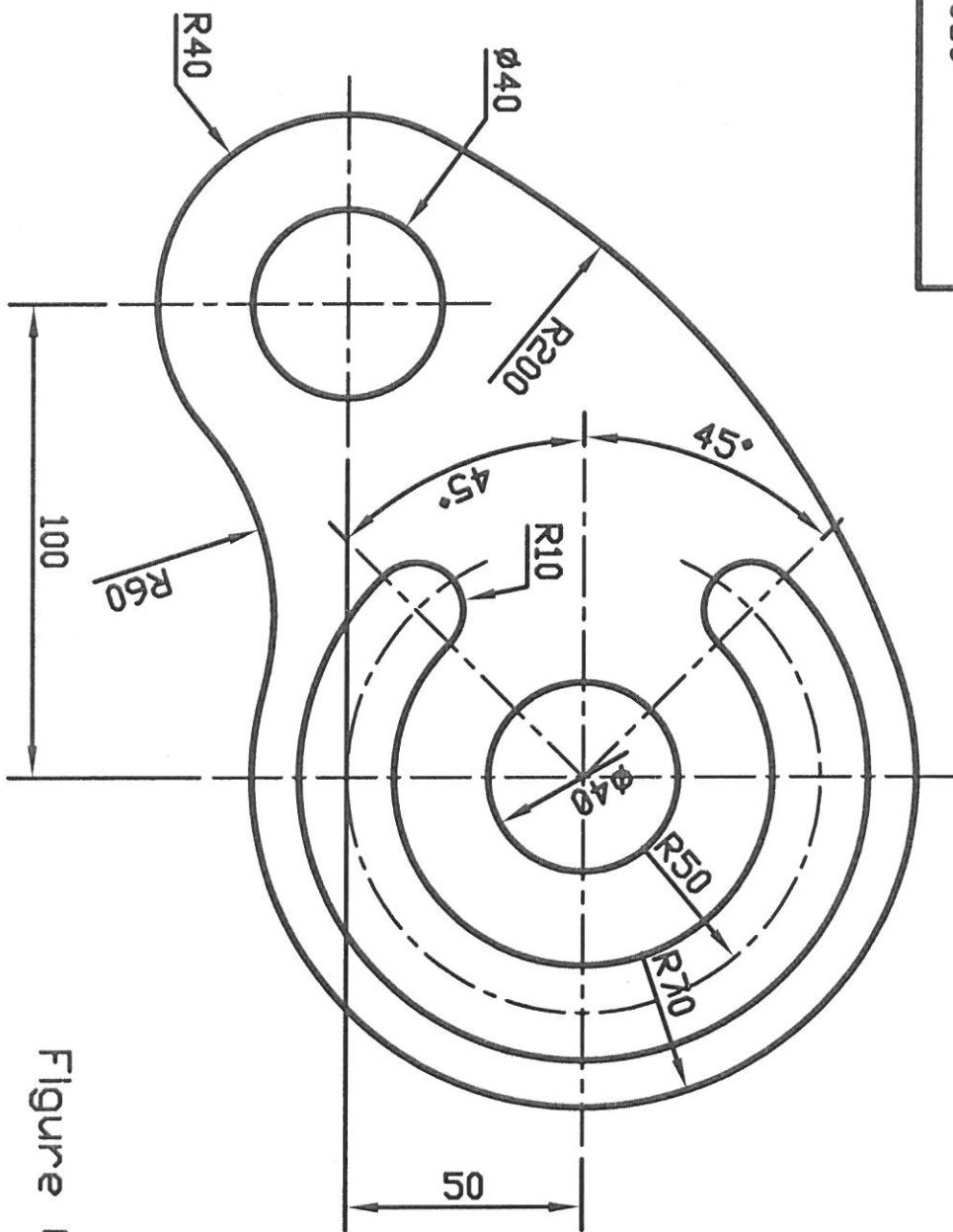
Figure Q3

Locking Plate

Figure Q4

Truncated

Rectangular

prism

R40

ø40

R200

45°

45°

R10

R60

100

R50

R70

ø40

50

Figure Q5

Swivel Bracket