



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION,
INNOVATION, SCIENCE AND TECHNOLOGY
DEVELOPMENT**

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL CERTIFICATE

IN

FABRICATION ENGINEERING

MODULE: Engineering Drawing

**PAPER NO: 324/22/M01-2
324/25/M01-2**

DURATION: 3 Hours

JUNE 2026 EXAMINATION

REQUIREMENTS

**A3 size drawing papers, drawing board, drawing instruments. Serialised
HEXCO cover page.**

INSTRUCTIONS TO CANDIDATE

- 1. Section A: This section consists of two (2) questions. Each question carries 30 marks. Answer one question only.**
- 2. Section B: This section consists of two (2) questions. Each question carries 30 marks. Answer one question only.**
- 3. Section C: This section consists of two (2) questions. Each question carries 40 marks. Answer one question only.**
- 4. Start the pattern development using the given seam.**
- 5. Do not write your name on the A3 drawing papers.**
- 6. Do not write anything on or in the question paper**

This paper consists of 7 printed pages.

SECTION A

QUESTION 1

Fig Q1 shows the connection of a rectangle vent and a right cone.

- (a) Draw the given views (7 marks)
- (b) Produce the joint line (8 marks)
- (c) Develop the pattern for the cone. (15 marks)

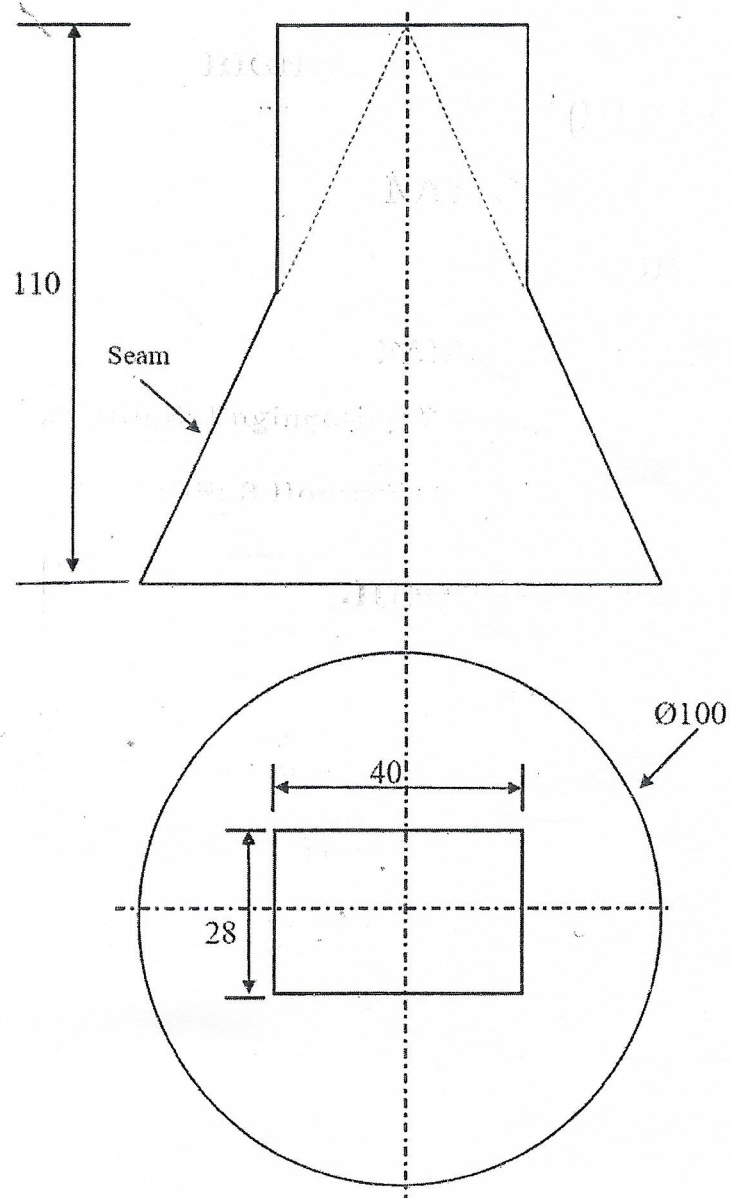


Fig Q1

QUESTION 2

Fig Q2 shows a breach piece which comprises of the main pipe, two right cones and two outlets. Use the common central sphere methods to:

- (a) Draw the given view. (7 marks)
- (b) Establish the joint lines on the breach piece. (8 marks)
- (c) Develop the pattern for the right-side cone. (15 marks)

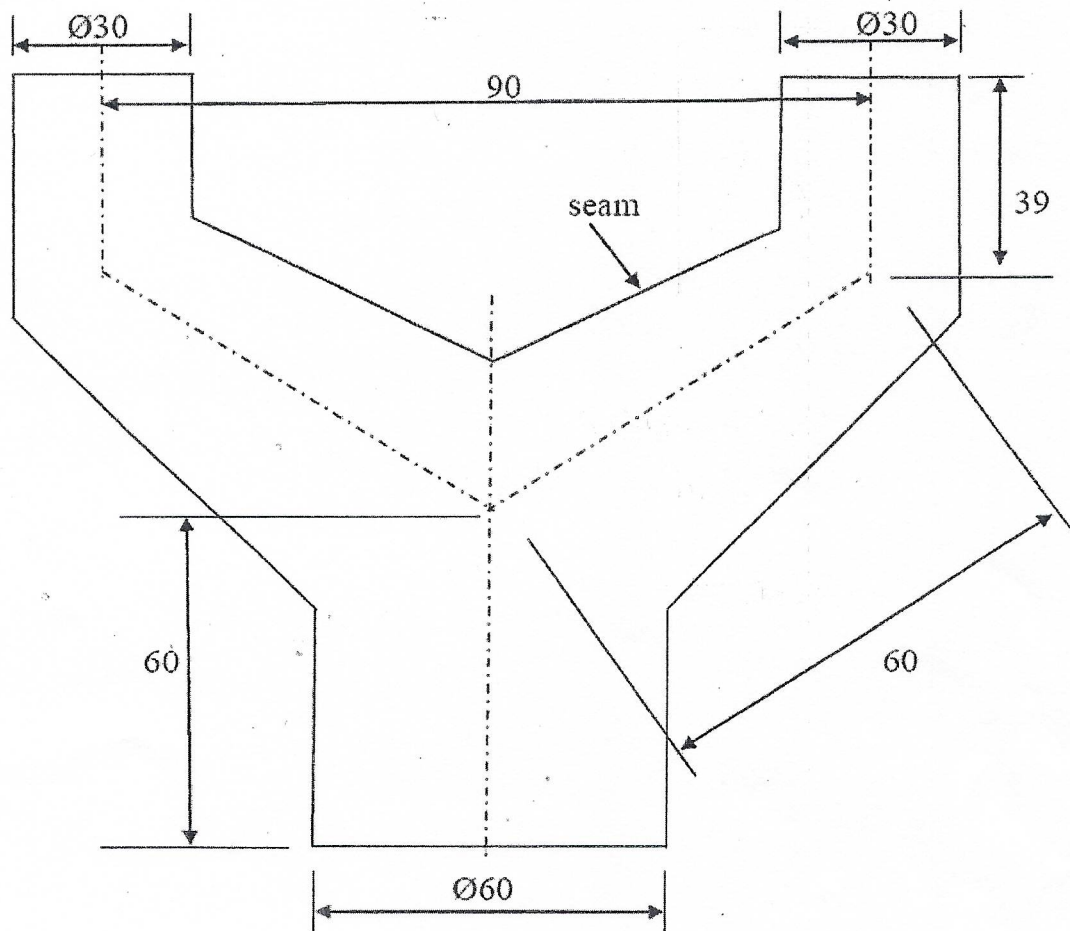


Fig Q2

SECTION B

QUESTION 3

Fig Q3 shows a main pipe intersected by a lobster back bend.

- (a) Draw the given view (6 marks)
- (b) Produce the joint line. (9 marks)
- (c) Develop the pattern for segment "B". (15 marks)

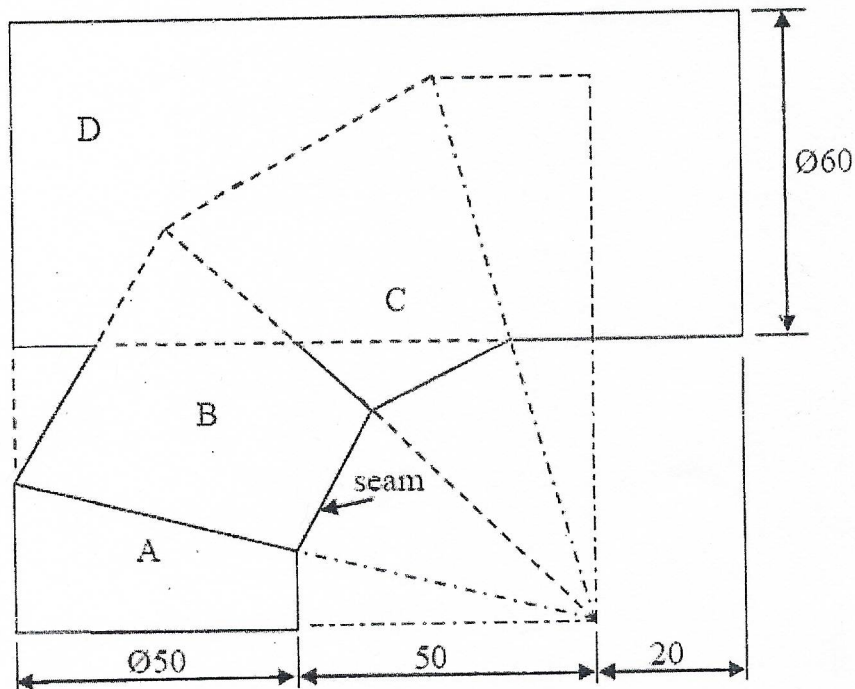
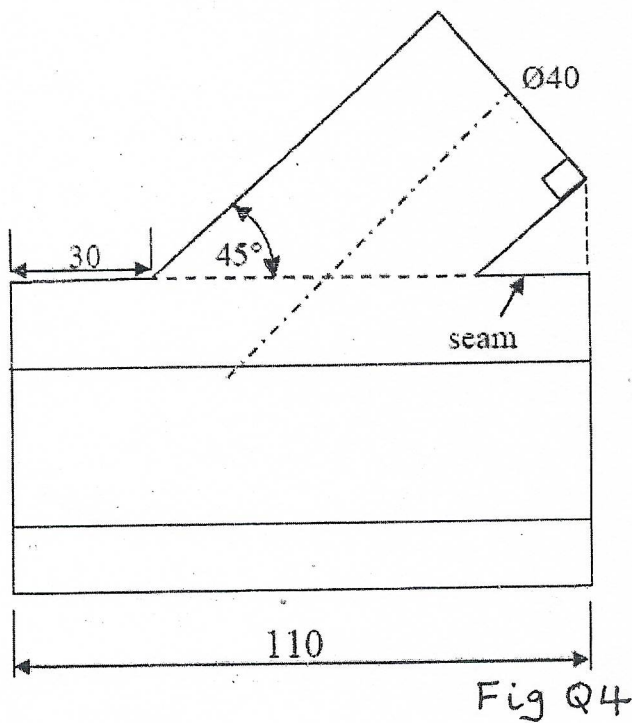


Fig: Q3

QUESTION 4

Fig Q4 shows a hexagonal duct intersected by an inclined pipe.

- (a) Draw the given views and complete the end view. (8 marks)
- (b) Establish the joint line. (7 marks)
- (c) Develop the pattern for the hexagonal duct. (15 marks)



QUESTION 5

Fig Q5 shows a transition piece to be developed and fabricated in the workshop.

- (a) Draw the given views and complete the folding lines on both views.
(15 marks)
- (b) Develop the pattern for the transition piece using seam A-O.
(25 marks)

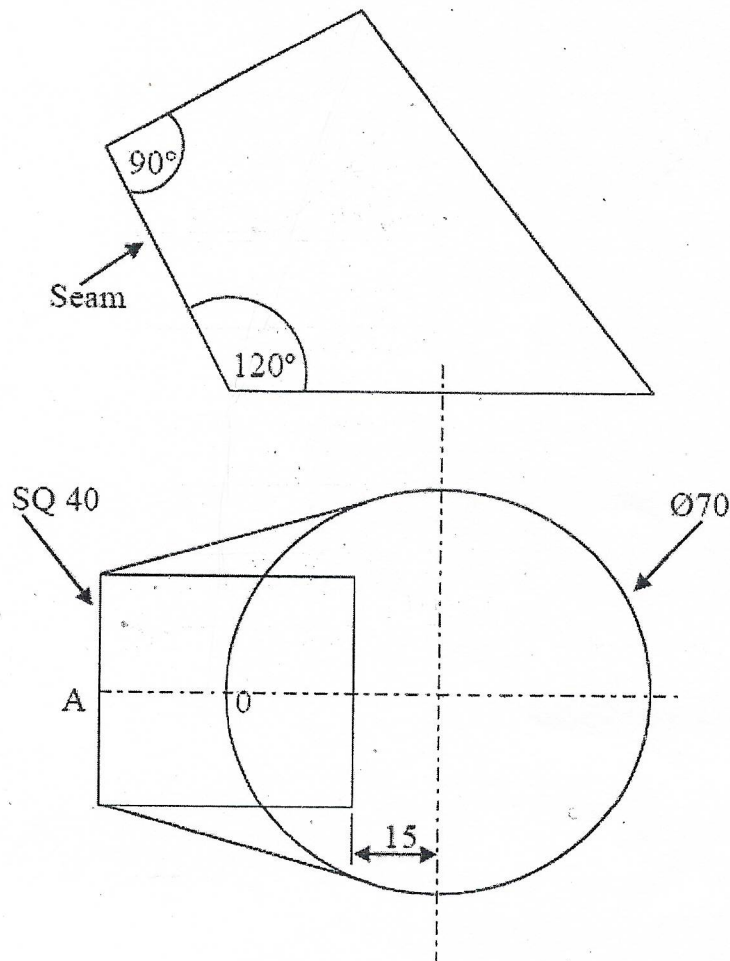


Fig Q5

QUESTION 6

Fig Q6 shows a hopper which should be developed and manufactured.

- (a) Draw the given views and complete the folding lines on both views. (15 marks)
- (b) Develop the pattern or the hopper using seam A -O. (25 marks)

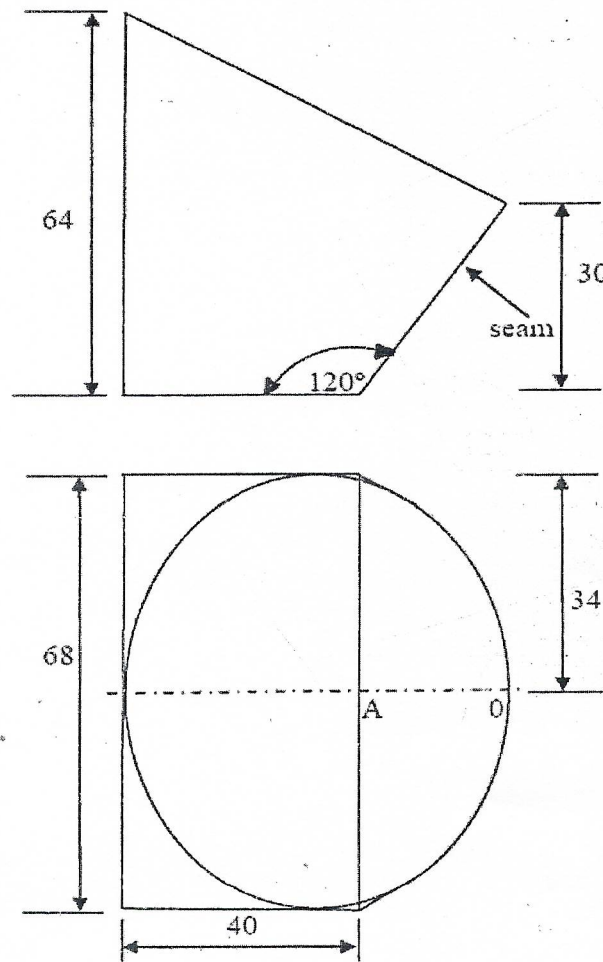


Fig Q6

...../cn