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Centre Number

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Student Number

**2005**  
**HIGHER SCHOOL CERTIFICATE**  
**EXAMINATION**

# Industrial Technology

## Graphics Industries

### General Instructions

- Reading time – 5 minutes
- Working time –  $1\frac{1}{2}$  hours
- Write using black or blue pen
- Draw diagrams using pencil
- Board-approved calculators may be used
- Write your Centre Number and Student Number at the top of this page and pages 5, 9, 13 and 17

### Total marks – 100

**Section I** Pages 2–12

#### 60 marks

- Attempt Questions 1–3
- Allow about 55 minutes for this section

**Section II** Pages 13–20

#### 40 marks

- Attempt Questions 4–5
- Allow about 35 minutes for this section

**Section I**

**60 marks**

**Attempt Questions 1–3**

**Allow about 55 minutes for this section**

Answer the questions in the spaces provided.

**Marks**

IND-TECH is a company in the graphics industry. The introduction of improved marketing strategies has increased demand for IND-TECH’s products. Management is aware that a planned restructure and expansion program will impact on IND-TECH’s production.

**Question 1 (20 marks)**

- (a) Greater demand for IND-TECH’s products can be met through increased production. **2**

Identify TWO ways in which increased production can be achieved.

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- (b) Identify a marketing strategy, and outline how this strategy could increase the demand for a product. **3**

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**Question 1 continues on page 3**

Question 1 (continued)

- (c) Define the term *quality control*. Explain how quality control can be used to improve IND-TECH's products. 4

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- (d) IND-TECH's management is planning to restructure its workforce. 4

Discuss how management will ensure stable industrial relations during this operation.

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**Question 1 continues on page 4**



Industrial Technology  
Graphics Industries

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Section I (continued)

**Marks**

**Question 2** (20 marks)

- (a) List TWO advantages of *multiskilling* in industry. **2**

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- (b) Explain an effect that specialisation could have on production and on the workforce. **3**

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**Question 2 continues on page 6**

Question 2 (continued)

- (c) Explain the term *sustainable development*, and recommend ways in which IND-TECH might make its operation more sustainable. 4

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- (d) Discuss the influence of occupational health and safety (OHS) legislation on production. 4

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**Question 2 continues on page 7**

Question 2 (continued)

(e) Before expanding or relocating, IND-TECH must prepare an Environmental Impact Statement (EIS). 7

Identify and discuss issues that could be covered in this statement.

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**End of Question 2**

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**Industrial Technology**  
**Graphics Industries**

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**Section I (continued)**

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**Marks**

**Question 3 (20 marks)**

- (a) Outline the purpose of a materials list in the planning or the production process. **2**

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- (b) Explain why shapes and colours are used in safety symbols. Use an example to support your answer. **3**

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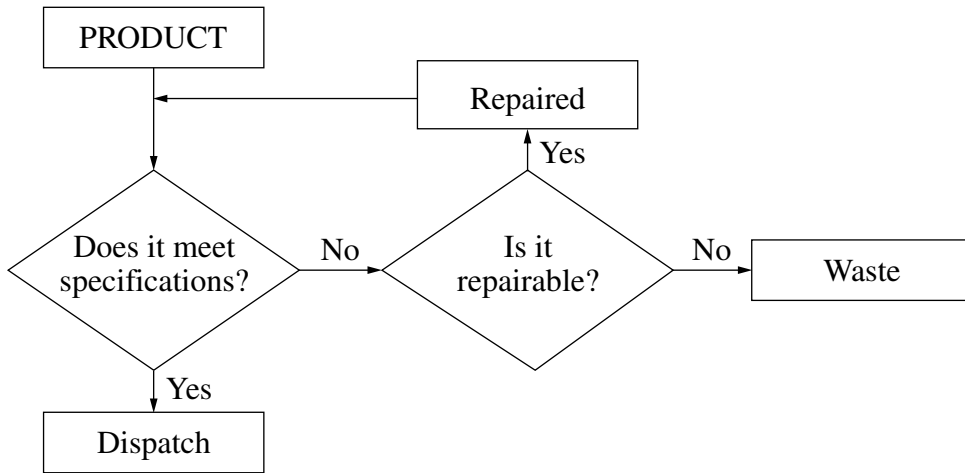
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**Question 3 continues on page 10**

Question 3 (continued)

(c) The diagram shows a process within a production system.

4



Identify the type of diagram used. Explain why this type of diagram is suitable for representing the steps outlined in this production system.

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Question 3 continues on page 11

Question 3 (continued)

- (d) Outline the importance of function and aesthetics in the design of a product. **4**

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**Question 3 continues on page 12**



# Industrial Technology Graphics Industries

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Centre Number

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## Section II

40 marks

Attempt Questions 4–5

Allow about 35 minutes for this section

Answer the questions in the spaces provided.

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**Marks**

### Question 4 (20 marks)

(a) Identify TWO features of sectioned drawings.

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(b) Outline the purpose of rendering when presenting product concepts.

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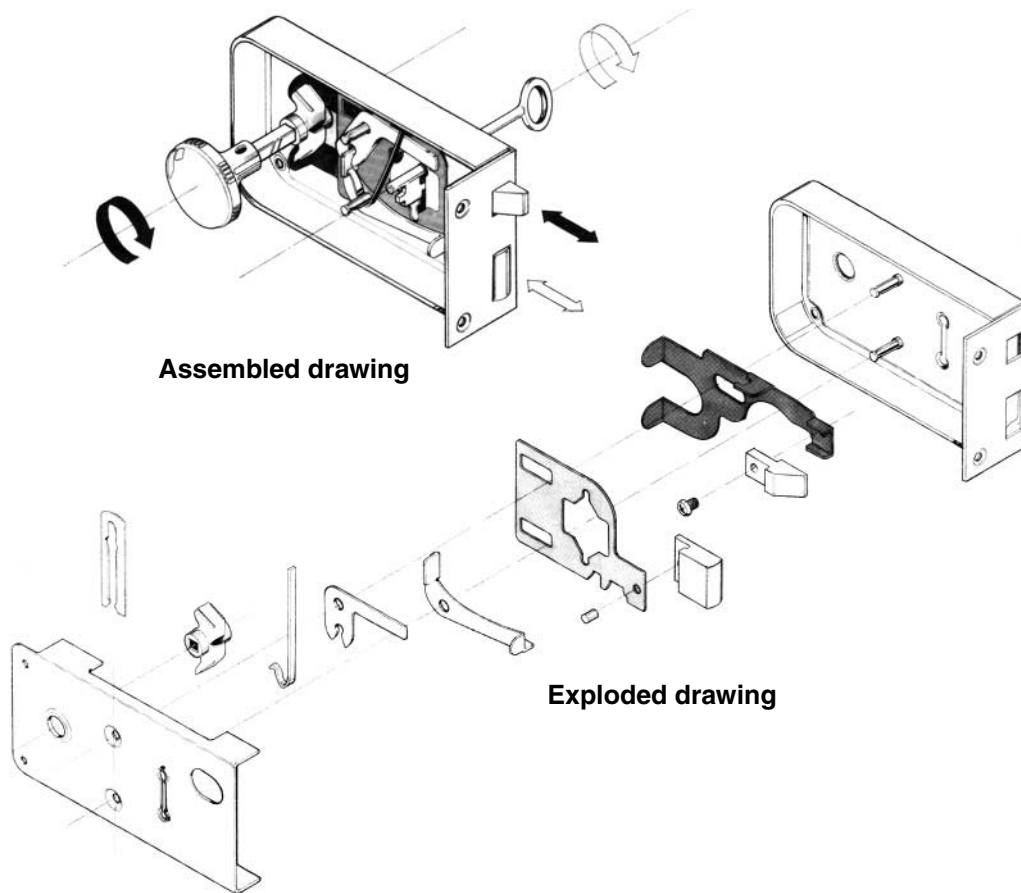
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**Question 4 continues on page 14**

Question 4 (continued)

(c) An assembled drawing and an exploded drawing of a door lock are shown.

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K.J.Dodds and P.S. Jordan, technical Studies Book 1 Pearson Education Australia (Longman),1984

Compare the roles of assembled and exploded drawings.

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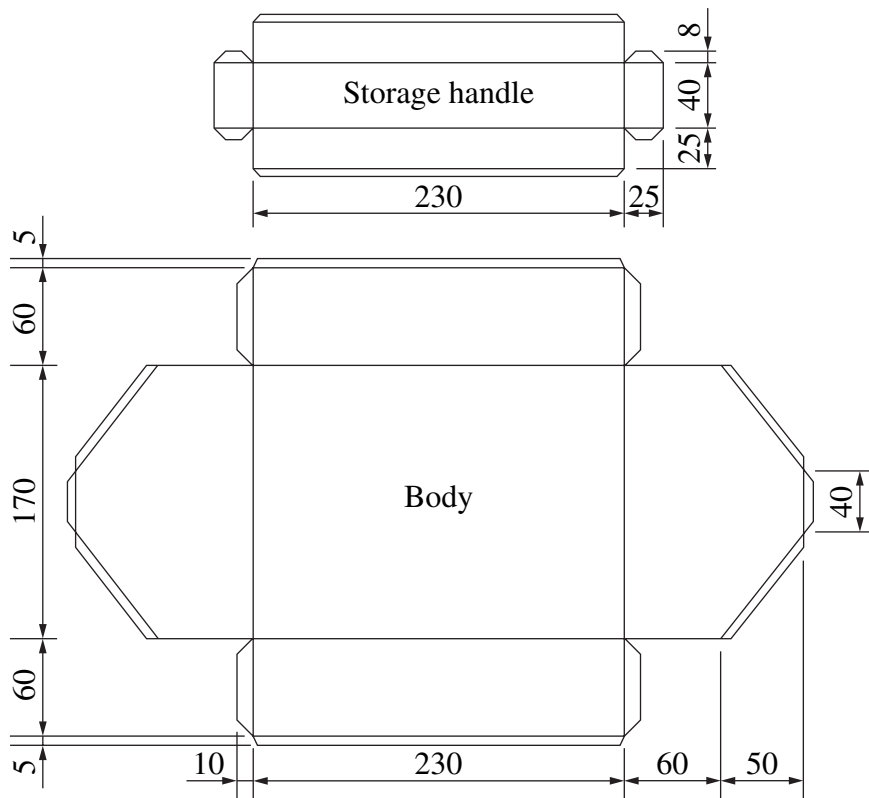
Question 4 continues on page 15

Question 4 (continued)

(d) The development of parts of a tool tray is shown.

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Sketch a pictorial view of the assembled tool tray in the space provided.



K. J. Dodds and P. S. Jordan, Technical Studies Book 1, Pearson Education Australia (Longman), 1984

Question 4 continues on page 16





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Student Number

Section II (continued)

Marks

Question 5 (20 marks)

- (a) Give TWO reasons why architects use models to represent ideas. 2

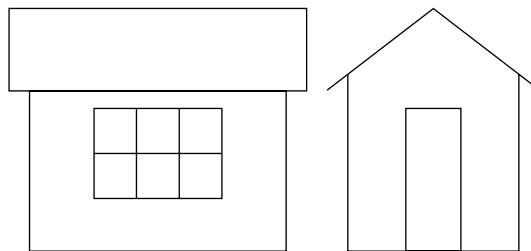
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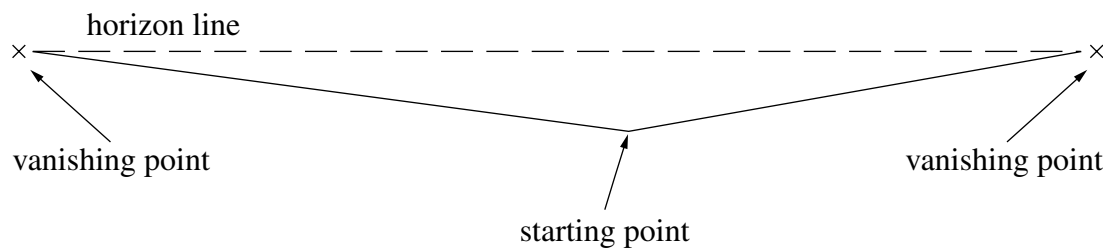
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- (b) The side and front view of a shed are shown. 3



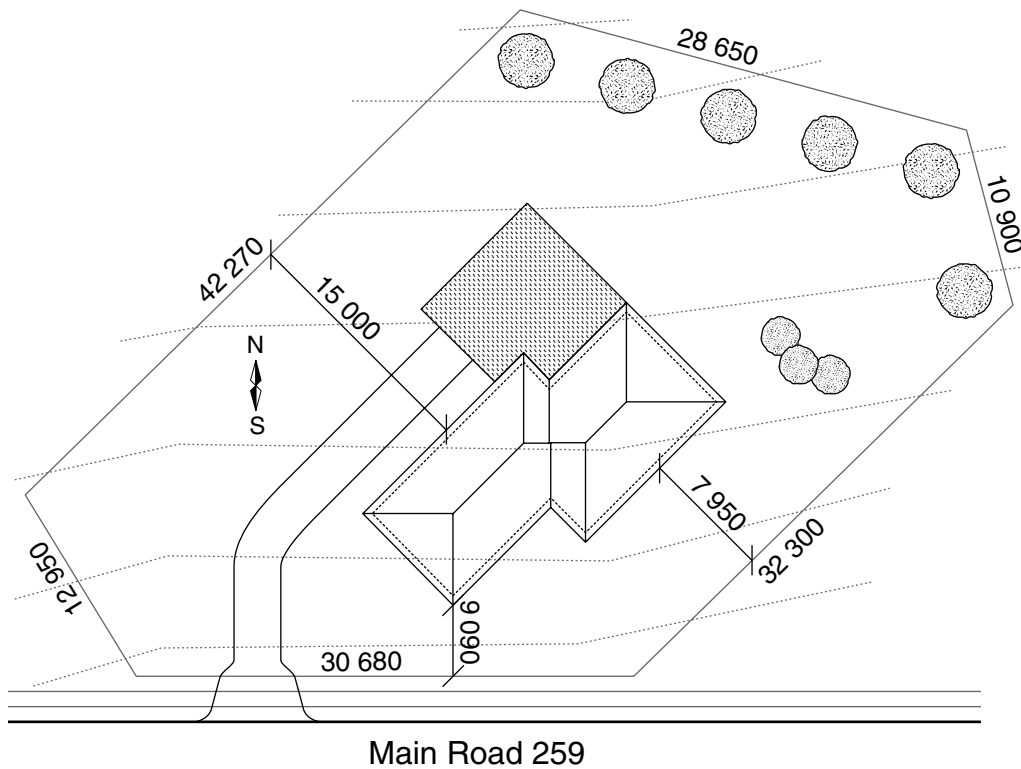
Draw a freehand perspective sketch of the shed, using the starting point provided.



Question 5 continues on page 18

Question 5 (continued)

- (c) Identify the essential information this site plan provides, and explain its importance to a builder. 4



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Question 5 continues on page 19

Question 5 (continued)

- (d) Discuss the importance of concept drawings for an architect presenting information to clients. **4**

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**Question 5 continues on page 20**

