

--	--	--	--	--

Centre Number

--	--	--	--	--	--	--	--	--	--

Student Number

2003
HIGHER SCHOOL CERTIFICATE
EXAMINATION

Industrial Technology

Multimedia 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, 17 and 21

Total marks – 100

Section I Pages 2–13

60 marks

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

Section II Pages 17–23

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

Question 1 (20 marks)

IND-TECH is a large company situated in the inner city, operating in the multimedia industry specialising in high quality products and/or services. For a variety of reasons the company has decided to purchase and relocate to a new site, 200 km from its present inner city site.

- (a) Identify TWO issues that may have influenced the decision to relocate. **2**

.....
.....
.....
.....

- (b) Outline TWO environmental responsibilities that must be dealt with when IND-TECH vacates the present site. **2**

.....
.....
.....
.....
.....
.....

Question 1 continues on page 3

Question 1 (continued)

- (c) Discuss TWO factors that IND-TECH should consider when choosing the alternative site. **4**

.....

.....

.....

.....

.....

.....

.....

.....

- (d) Identify and describe TWO occupational health and safety (OHS) issues that IND-TECH would need to review/develop for the new workplace. **4**

.....

.....

.....

.....

.....

.....

.....

.....

Question 1 continues on page 4

Industrial Technology
Multimedia Industries

--	--	--	--	--

Centre Number

--	--	--	--	--	--	--	--	--

Student Number

Section I (continued)

Marks

Question 2 (20 marks)

Management at IND-TECH has decided to upgrade the level of mechanisation as part of its relocation.

- (a) Define the term *mechanisation*. 2

.....

.....

.....

.....

- (b) Outline an aspect of IND-TECH's operations that could be investigated for upgraded mechanisation. 2

.....

.....

.....

.....

Question 2 continues on page 6

Question 2 (continued)

- (c) Describe TWO methods of evaluating the effects of upgraded mechanisation on IND-TECH's operation. **4**

.....

.....

.....

.....

.....

.....

.....

.....

- (d) Upgraded mechanisation will require staff training. Outline the advantages for IND-TECH and its workers of accessing training programs. **4**

.....

.....

.....

.....

.....

.....

.....

.....

Question 2 continues on page 7

BLANK PAGE

**Industrial Technology
Multimedia Industries**

--	--	--	--	--

Centre Number

Section I (continued)

--	--	--	--	--	--	--	--	--


Student Number

Question 3 (20 marks)

Please turn over

Question 3 (20 marks)

- (a) The following extract is from a draft report that was produced using computer software.



Half-Yearly Production Report
January 2003 – June 2003

<i>Production rate summary</i>		
<i>Month</i>	<i>Year</i>	<i>Production rate (units)</i>
January	2003	270
February	2003	300
March	2003	325
April	2003	335
May	2003	340
June	2003	370

Growth in production is due to:

- Improved technology
- Better training
- Fewer accidents in the workplace
- Increased access to raw materials

Page 1

- (i) Name a computer software application that could have been used to produce this report. **1**

.....

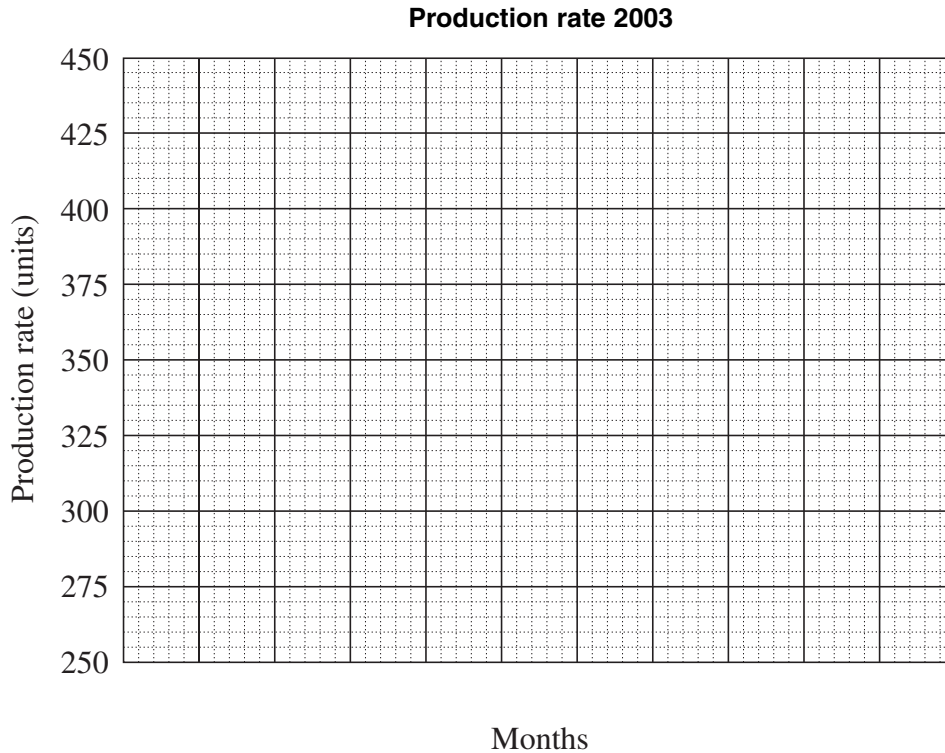
- (ii) Identify FOUR formatting features that have been used in the production of this report. **2**

.....

Question 3 continues on page 11

Question 3 (continued)

- (iii) (1) Use the information from the production report to: 3
 - produce a graph that shows the monthly production rate (indicate the months on the horizontal axis);
 - graph the average monthly production rate (January–June).
- (2) Assuming the production trend continues, indicate on the graph the predicted production rate for September 2003. 2



- (b) Materials handling injuries make up 40% of workplace injuries. Describe a procedure IND-TECH could implement to communicate improved materials handling strategies to its employees. 4

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 3 continues on page 12

Question 3 (continued)

- (c) IND-TECH has been commissioned by a real-estate organisation to develop a multimedia presentation that will support the marketing of one of their properties. Shown below is a CD that will be used in the final presentation. 8



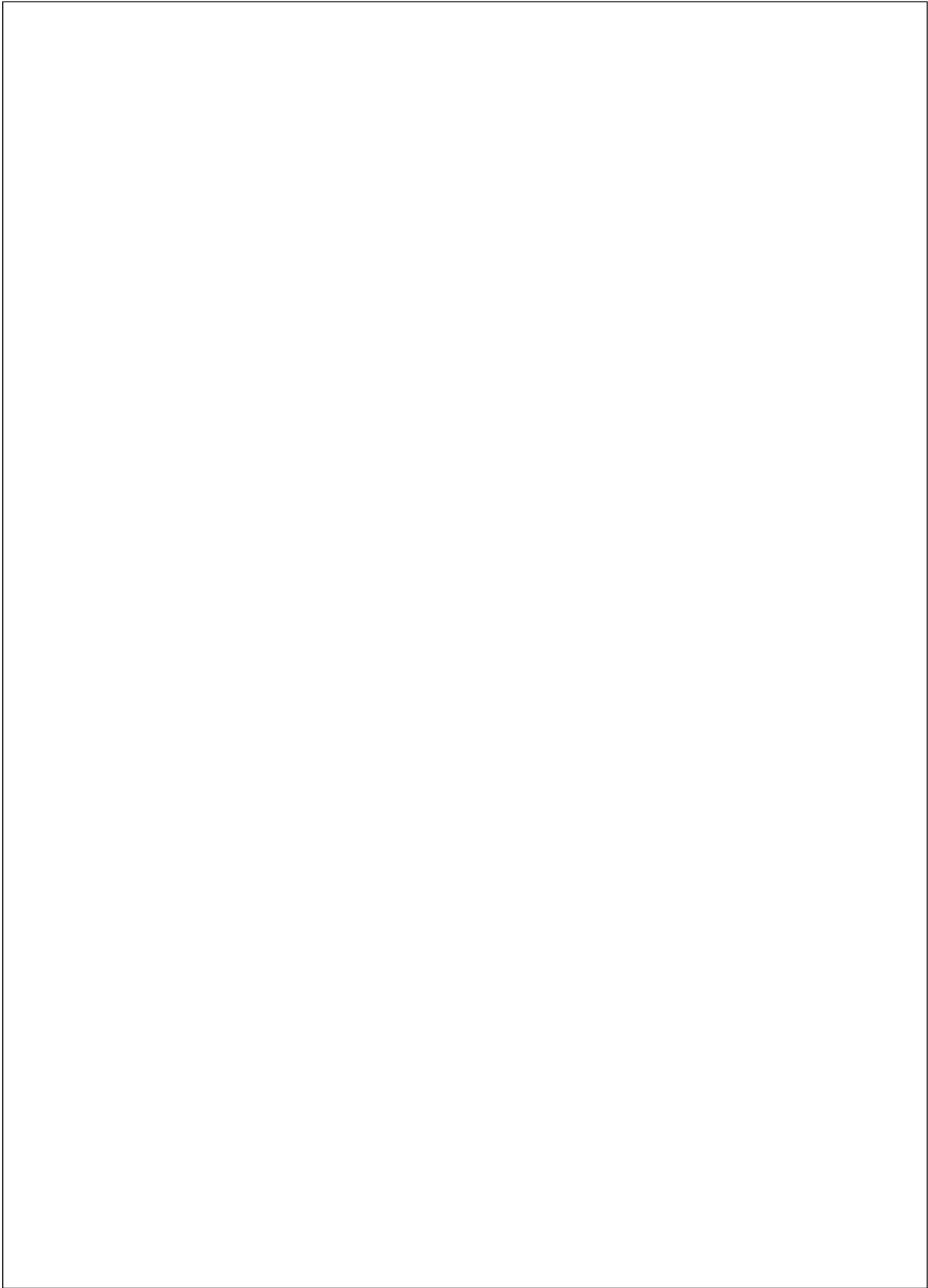
CD advertising a real-estate promotion

Based on your study of the multimedia industry, use the space provided on page 13 to graphically represent the process used in developing the multimedia presentation on the CD shown. In your answer you should:

- show the sequencing of the components and/or processes;
- name each piece of equipment used;
- state the process carried out with each piece of equipment;
- indicate where quality control would occur, and what would be checked.

Question 3 continues on page 13

Question 3 (continued)



End of Question 3

BLANK PAGE

BLANK PAGE

BLANK PAGE

**Industrial Technology
Multimedia Industries**

--	--	--	--	--

Centre Number

--	--	--	--	--	--	--	--	--

Student Number

Section II

40 marks

Attempt Questions 4–5

Allow about 35 minutes for this section

Answer the questions in the spaces provided.

Marks



Question 4 (20 marks)

- (a) Multimedia is a term widely used in the computing area. Define the term *multimedia*. **2**

.....

.....

- (b) The devices shown below are used to create either images or text. Complete the table. **2**

	<i>Used for</i>	<i>Examples of manipulation software</i>
 Digital camera		
 Scanner		

Question 4 continues on page 18

Question 4 (continued)

- (c) When preparing material for publication, an author must be aware of the implications of using copyright material. **4**

Define *copyright*, and explain the responsibilities of an author wishing to use copyright material.

.....
.....
.....
.....
.....
.....
.....
.....
.....

- (d) File types are often defined by the addition of a suffix. Compare the characteristics and features of files with the following suffixes: **4**

- bmp
- tif/tiff
- jpg/jpeg

.....
.....
.....
.....
.....
.....
.....
.....
.....

Question 4 continues on page 19

BLANK PAGE

Industrial Technology
Multimedia Industries

--	--	--	--	--

Centre Number

--	--	--	--	--	--	--	--	--

Student Number

Section II (continued)

Marks

Question 5 (20 marks)

- (a) The ability to access multimedia presentations from the Web relies on bandwidth. 2
Define the term *bandwidth*.

.....

.....

- (b) Describe a method of ensuring that multimedia presentations can be effectively downloaded from the Web. 2

.....

.....

.....

.....

- (c) Outline different factors which effect the performance of each of the three hardware devices listed below: 3

- HDD
- Video card
- CD burner

.....

.....

.....

.....

.....

.....

Question 5 continues on page 22

Question 5 (continued)

(d)

5



To achieve an effective workplace, an operator must observe correct work practices. From the illustration shown, identify a range of poor work practices, and recommend methods of rectifying them.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 5 continues on page 23

BLANK PAGE