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Centre Number

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Student Number

2001
HIGHER SCHOOL CERTIFICATE
EXAMINATION

Industrial Technology

Multimedia Industries

General Instructions

- Reading time – 5 minutes
- Working time – 1½ 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 page 13

Total marks – 100

Section I Pages 2–10

60 marks

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

Section II Pages 13–18

40 marks

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

Question 1 (continued)

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(b) Outline how the expansion of the company could impact on its organisation and management. **2**

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(c) Describe TWO marketing features that would support the expansion of the company. **2**

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Question 1 continues on page 4

Question 1 (continued)

(d) Owing to increased sales, mass production and quality control techniques are investigated to meet the demand for the new products and to improve services to the consumer.

(i) What is mass production? Explain how the introduction of mass production could affect the profitability of the company. **4**

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(ii) Describe how quality control could be used to improve BOTH the products and the services provided to the consumer. **4**

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End of Question 1

Question 2 (20 marks)

The same company needs to improve its efficiency in order to expand.

- (a) List the implications for the company of purchasing new equipment to improve its efficiency. **2**

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- (b) The company has decided to multiskill its workforce.
 - (i) Outline how multiskilling could make this company more efficient. **2**

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- (ii) Describe personnel issues other than multiskilling that would directly influence efficient production. **4**

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Question 2 continues on page 6

Question 2 (continued)

- (c) Describe how computer software applications can be used to assist in the effective planning, development and management of production projects. **6**

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- (d) Discuss training methods that the company could use to ensure that staff are competent in their use of its software applications. **6**

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End of Question 2

Question 3 (20 marks)

- (a) Workplace injuries account for a large amount of lost production time.

In order to address this concern, a company from the multimedia industries has decided to display a number of safety signs throughout the workplace. A sample is shown.



- (i) What message does the safety sign convey? **1**

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- (ii) Explain how the features of this sign add to its effectiveness in communicating the intended message. **3**

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Question 3 continues on page 8

Question 3 (continued)

- (iii) Why is it important to carefully consider the placement of this safety sign in the workplace? **2**

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- (iv) Name strategies, other than signage, that this company could use to reduce workplace injuries. **2**

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Question 3 continues on page 9

Question 3 (continued)

- (ii) The company has decided to produce 80 copies of the new safety manual. Each manual contains 15 pages. **3**

Complete the table, indicating the costs of producing these manuals.
All prices are inclusive of GST.

<i>Item</i>	<i>Unit cost</i>	<i>Total cost</i>
Artwork	\$200.00	\$200.00
Printing	50 cents per page	
Reams of paper	\$6.00 per ream (500 sheets)	
Binding for manual	\$4.00 per manual	

End of Question 3

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Industrial Technology
Multimedia Industries

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Centre Number

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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) A person scans an image, but finds that it takes up too much memory to fit onto a floppy disk. Identify TWO techniques that could be employed to ensure that the data fits onto a floppy disk. 2

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- (b) Explain the purpose and use of storyboards. 2

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Question 4 continues on page 14

Question 4 (continued)

- (c) Sound can be recorded in a variety of formats. Name ONE format and describe its basic principles. **3**

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- (d) Vector and bitmapped are common graphics formats, designed for different tasks.

- (i) Describe ONE task that is more easily performed with vector-based software. **2**

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- (ii) Name and justify the use of a graphics file format which could be suitable for inclusion in a web page. **2**

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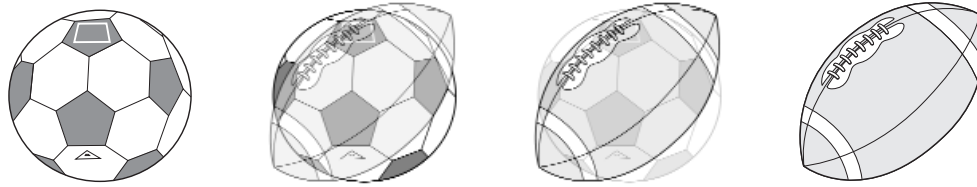
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Question 4 continues on page 15

Question 5 (20 marks)

- (a) In the four images, a computer animated technique has been used to transform the soccer ball into a rugby ball. **1**



Name this technique.

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- (b) Name ONE input/output port that can be used to connect devices such as digital cameras and scanners to a computer. **1**

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- (c) Use the diagram to answer parts (i) and (ii).



- (i) Describe how the diagram could be converted and saved into a digital format using a scanner. **3**

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Question 5 continues on page 17

Question 5 (continued)

- (ii) Describe the process you would follow to remove the hat from the scanned image. **2**

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- (d) (i) Explain, giving examples, how a presentation may be enhanced using a multimedia technique. **2**

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- (ii) What ethical issues need to be considered when obtaining material for multimedia presentations from sources such as the Internet? **2**

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Question 5 continues on page 18

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