



HIGHER SCHOOL CERTIFICATE EXAMINATION

**2000**  
**INDUSTRIAL**  
**TECHNOLOGY**  
**2 UNIT**  
**SECTION I**

*Total time allowed for Sections I and II—One hour and a half  
(Plus 5 minutes reading time)*

**STUDENT NUMBER**

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**CENTRE NUMBER**

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**FOCUS AREAS**

(Tick the Focus Area you studied.)

Automotive Industries	
Building and Construction Industries	
Electronics Industries	
Furniture and Timber Products Industries	
Graphics and Multimedia Industries	
Metals and Engineering Industries	
Plastics Industries	

**DIRECTIONS TO CANDIDATES**

- Write your Student Number and Centre Number at the top right-hand corner of this page and tick (✓) the Focus Area you have undertaken.
- Where appropriate, show all working for solutions neatly and clearly.
- You may use Board-approved drawing instruments and calculators.

**Section I** (25 marks)

- All questions in Section I are **COMPULSORY**.
- Answer the questions in the spaces provided in this paper.

**Section II** (15 marks)

- Question 4 is **COMPULSORY**.
- Attempt **TWO** questions from Questions 5, 6, and 7.
- Attempt only questions from the Focus Area you studied.
- Answer the questions in the spaces provided in the Section II paper.
- Write your Student Number and Centre Number at the top right-hand corner of the first page of the Section II paper.

### SECTION I

(25 Marks)

Attempt ALL questions.

#### QUESTION 1 (10 marks)

A company, located in the inner city and with a workforce of 145, has recently decided to enlarge its operations. The company expects to make a large capital outlay on relocation and new equipment. In the new location, the company plans to increase production and improve working conditions.

The company is privately owned and employs a General Manager and a number of Section managers, as shown in Figure 1.

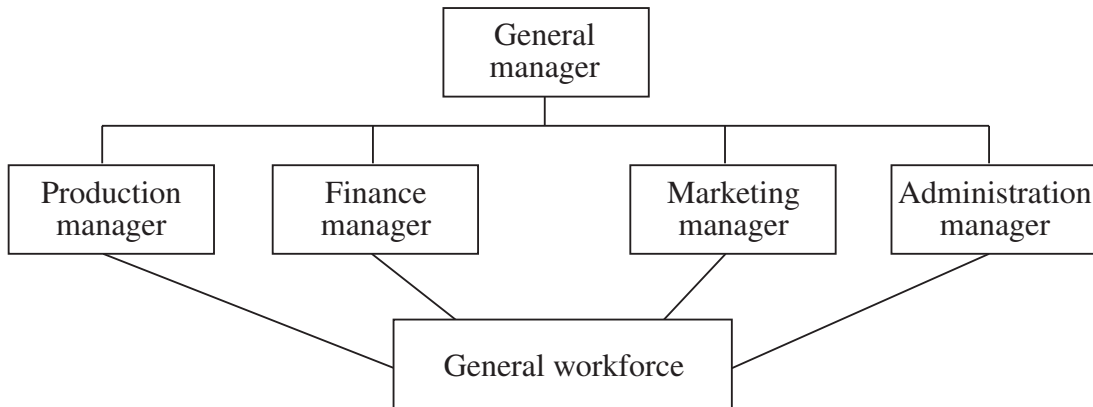


FIG. 1

(a) In its current location, the company has received a number of complaints from local residents regarding air pollution, and it has been fined by government authorities for breaches of the Clean Air Act (1987).

(i) Explain the process that the company would need to follow to investigate the pollution problems.

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(ii) As a result of the investigation, it was found that several machines were emitting toxic fumes. What interim measures should be carried out to solve the pollution problems *before* the company relocates?

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QUESTION 1 (Continued)

- (iii) The investigation found that some machines were emitting toxic fumes. What recommendations need to be implemented to ensure that this pollution problem does not occur in the new location?

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- (b) When it relocates, the company has decided to restructure its entire workforce, to improve efficiency.

- (i) Describe TWO roles of the following in the restructuring process.

1 Management

- (I) .....
- .....
- (II) .....
- .....

2 Unions

- (I) .....
- .....
- (II) .....
- .....

3 Workforce

- (I) .....
- .....
- (II) .....
- .....

QUESTION 1 (Continued)

- (ii) If personnel were to be retrenched, how would the company determine the entitlements for each person retrenched?

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**QUESTION 2** (5 marks)

The company referred to in Question 1 employs 100 people in the workshop and a further 45 people in the administration area and various levels of management.

- (a) Explain why a structured internal communication system needs to be set in place for this company.

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- (b) Describe TWO strategies that middle management can utilise to facilitate communication with people in the workshop.

Strategy 1 .....

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Strategy 2 .....

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- (c) At a management meeting, it was suggested that managers carry mobile phones when they are out of the office.

- (i) List TWO factors that need to be considered by management before they purchase the phones.

Factor 1 .....

Factor 2 .....

- (ii) Explain how the use of mobile phones could assist management in the running of the company. Give examples to support your answer.

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QUESTION 2 (Continued)

(d) The company intends to improve production and expand the range of products it makes.

(i) Explain the role of the Production Manager in this process.

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(ii) How could the Marketing Manager determine the target market?

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**QUESTION 3** (10 marks)

The management of the company referred to in Question 1 have restructured the company to remain competitive. They have determined problems in the following areas:

- Entry-level training of unskilled employees
- Training and multi-skilling of employees
- Occupational Health and Safety in the workplace
- The way employees handle materials in the workplace.

(a) Describe how the training of unskilled employees may impact on the company.

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(b) (i) Describe TWO strategies that the management of the company can adopt to increase the skills of its employees.

Strategy 1 .....

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Strategy 2 .....

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(ii) Explain TWO impacts that multi-skilling would have on the company.

Impact 1 .....

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Impact 2 .....

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QUESTION 3 (Continued)

(c) The Occupational Health and Safety Act plays an important part in enforcing workplace safety within the company.

(i) Explain the impact of the Occupational Health and Safety Act on employees.

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(ii) Discuss the ways workplace culture has been forced to change as a result of the Occupational Health and Safety Act.

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(iii) Propose a strategy that could reduce work-related absences caused by poor material handling practices.

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**End of Section I**