

AQA Unit 1 Level 2 Engineering Diploma Exam Friday 16 January 2009

Below are the questions from the exam.

SECTION A

Answer all questions in this section.

Questions 1 to 5 are about what you did in the team.

- 1 Describe how your team shared out the work and what your responsibilities were in the group investigation.

Distribution of work
Responsibilities
(2 marks)
- 2 What research methods did your team use during your investigation?

(1 mark)
- 3 Explain how you recorded your findings and reported these back to the rest of the team.

(2 marks)
- 4 Explain how you managed the available time to complete the investigation.

(2 marks)
- 5 Give two reasons why engineers work in teams on projects or for investigations.

Reason 1
Reason 2

(2 marks)

Questions 6 to 9 refer to the use of Global Positioning Systems (GPS).

- 6 Explain why accurate and reliable Positioning Systems are so important to large scale civil engineering projects. You must give two reasons.

Reason
Reason

(4 marks)
- 7 Describe the major developments in Global Positioning Systems (GPS) over the last twenty years and how they were introduced into Engineering.

(4 marks)
- 8 Compare GPS to conventional positioning systems giving advantages and disadvantages of each.

(4 marks)
- 9 Give three examples of how people's lives have changed as a result of the wider use of GPS as a Civil Engineering tool or a navigation aid.

(3 marks)

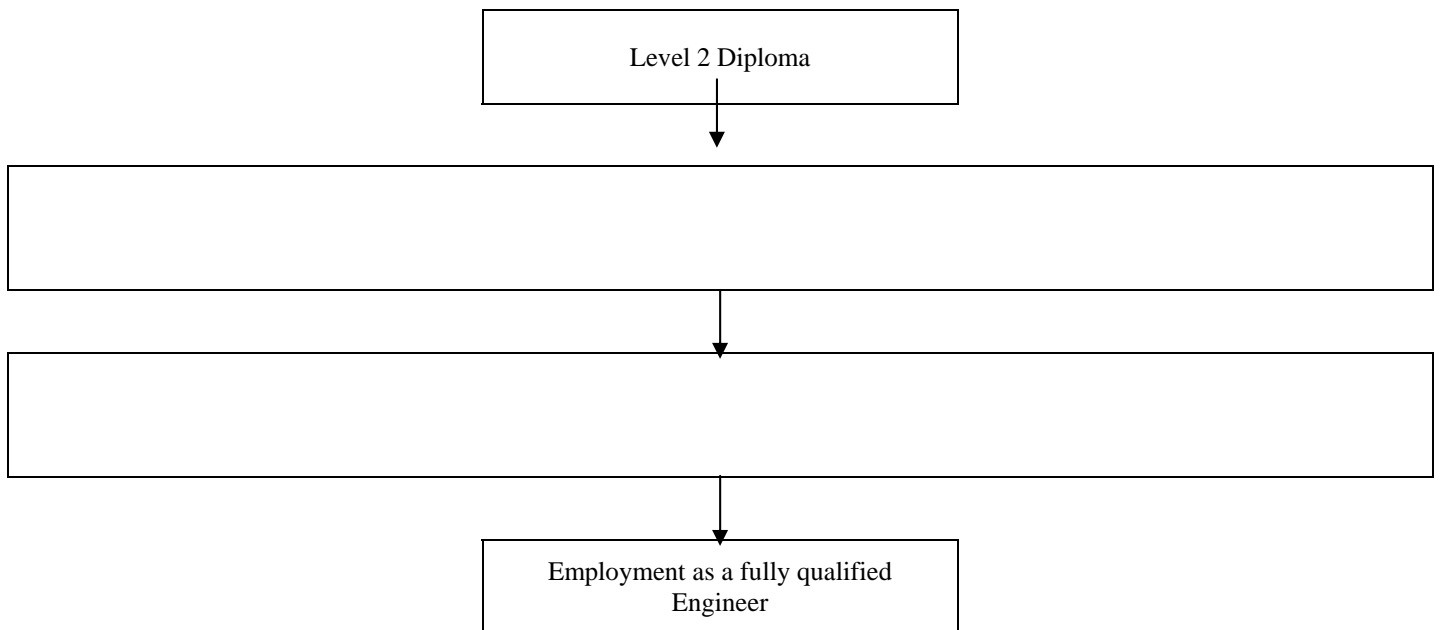
Section B

Answer all questions in this section.

Questions 10 to 18 are about engineering sectors.

- 10 Manufacturing and Maintenance and Built Environment Engineering are two engineering sectors within the engineering industry. Name three of the other engineering sectors that make up the engineering industry.
- 1
 - 2
 - 3
- (3 marks)
- 11(a) Describe two of the products from the Manufacturing and Maintenance sector.
- 1
 - 2
- (2 marks)
- 11(b) Describe two different products from other sectors of the engineering industry.
- 1
 - 2
- (2 marks)
- 12(a) Describe two of the services from the Manufacturing and Maintenance sector.
- 1
 - 2
- (2 marks)
- 12(b) Describe two different services from other sectors of the engineering industry.
- 1
 - 2
- (2 marks)
- 13 Describe a professional role that is carried out by an engineer in the Manufacturing and Maintenance sector.
- (3 marks)
- 14 Explain the career and training opportunities that you would need to follow in order to become a technician in the engineering sectors.
- (2 marks)

- 15 Complete the flow chart which shows the career path to becoming a professional engineer in the Engineering Manufacturing and Maintenance sector.



(2 marks)

- 16 Explain two areas in which the professional bodies have set and maintained standards in the engineering sectors.

(2 marks)

- 17 Give two reasons why employment legislation is necessary in the engineering industry.

(2 marks)

- 18 Give two responsibilities of an employer with regard to Health and Safety.

1
2

(2 marks)

END OF QUESTIONS