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Answer ALL questions. Write your answers in the spaces provided.

PART A

1. Describe **two** duties of an employer under the Management of Health and Safety at Work Regulations 1999.

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(Total 4 marks)

Q1

2. Describe **two** safe working practices to use when carrying out concreting operations on site.

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(Total 4 marks)

Q2



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3. Describe **two** sustainable procedures that could be used for on-site waste and recycling management.

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(Total 4 marks)

Q3

4. Non-compliance with health and safety or environmental legislation can be costly in terms of legal fees and fines. Describe **two** other non-recoverable costs that could impact on a company.

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(Total 4 marks)

Q4

TOTAL FOR PART A: 16 MARKS





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PART B

5. Describe and evaluate **one** method of protecting adjacent structures during construction operations. Use a sketch to help illustrate your answer.

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Q5

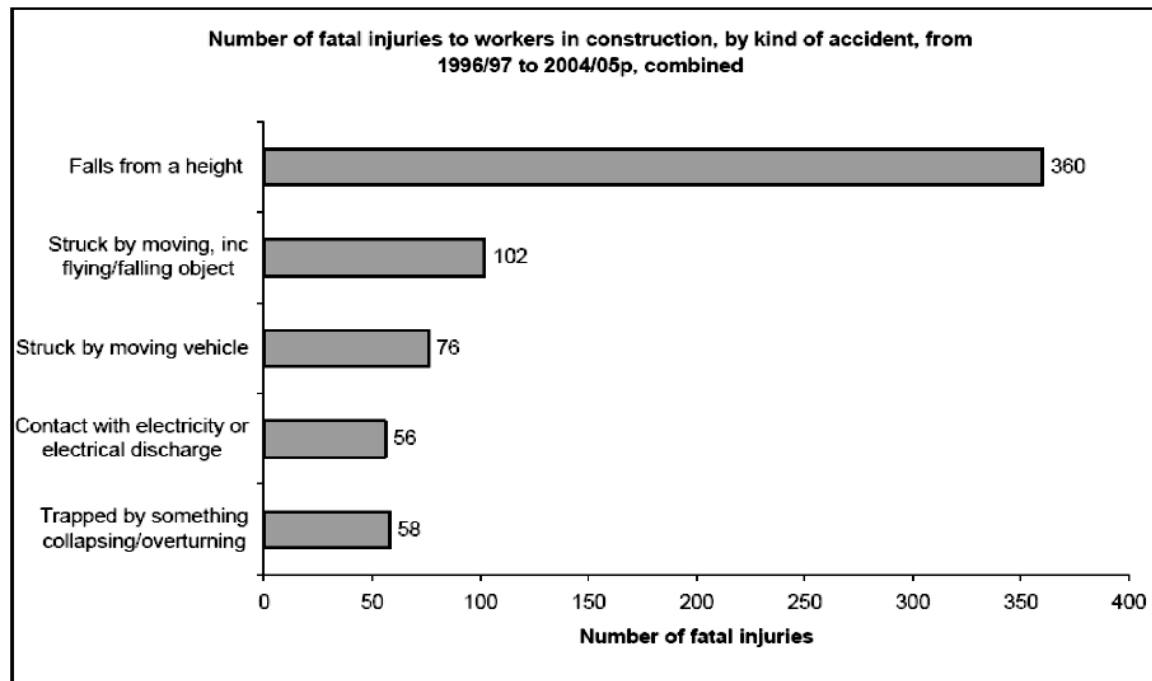
(Total 6 marks)

5

Turn over



6. The chart below shows the number of fatal injuries to workers in the construction industry over an eight year period.



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Analyse the chart and describe how the information could be used by a construction manager during the planning of safe working procedures for a construction project.

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Q6

(Total 6 marks)

7

Turn over



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7. (a) Define what is meant by the term 'environmental accident'.

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(b) Describe **four** typical examples of environmental accidents that could occur on a construction site.

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(4)

(Total 6 marks)

Q7



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8. Describe and analyse **two** benefits of biomass fuel as an energy source for a building project.

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(Total 6 marks)

Q8

TOTAL FOR PART B: 24 MARKS



PART C

Both questions in Part C refer to the following construction scenario.



Existing five storey factory building

The site contains a disused five storey factory, built around 1900 and formerly used as an engineering works. The external envelope is brick built and the internal floors and flat roof are constructed from reinforced concrete. It is proposed to refurbish and redevelop the factory into high quality student accommodation for a local university.



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9. (a) Acting as an environmental consultant to the design team, state the purpose of an environmental energy audit.

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(b) Describe **six** processes used in the production of an environmental energy audit for the student accommodation.

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(c) Identify and describe **one** recognised energy rating system used to comply with current Building Regulations.

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(2)

(Total 10 marks)

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Q9



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