



General Certificate of Education
Advanced Level Examination
January 2011

Health and Social Care

HC14

Unit 14 Diagnosis and Treatment

Monday 31 January 2011 1.30 pm to 3.30 pm

For this paper you must have:

- a 16-page answer book.

Time allowed

- 2 hours

Instructions

- Use black ink or black ball-point pen.
- Write the information required on the front of your answer book. The **Examining Body** for this paper is AQA. The **Paper Reference** is HC14.
- Answer **all** questions.
- Do all rough work in your answer book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- You will be marked on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

Answer **all** questions.

There are 20 marks for each question.

Question 1

Joan went to see her GP as she felt unwell. Joan's GP physically examined her using palpation and percussion to determine Joan's symptoms. The GP then used her computer to help make a provisional diagnosis. As a result Joan was referred for a CT scan.

- 0 | 1** Describe how the GP would use palpation to help to determine Joan's symptoms. (4 marks)
- 0 | 2** Describe how the GP would use percussion to help to determine Joan's symptoms. (4 marks)
- 0 | 3** Explain how using a computer can help Joan's GP make a provisional diagnosis. (4 marks)
- 0 | 4** Describe how a CT scan will be carried out to help diagnose Joan's medical condition. Include in your answer an explanation of the basic principles of CT scanning. (7 marks)
- 0 | 5** Give **one** advantage of CT scanning compared with conventional x-ray imaging. (1 mark)

Question 2

A survey of hospital admissions for adults with smoking related diseases produced the data shown below.

Year	Hospital Admissions: Smoking-related diseases 2001–2007			
	Cancers	Respiratory diseases	Circulatory diseases	Other diseases
2001/02	27 400	16 200	64 750	16 160
2002/03	28 350	16 900	66 610	18 040
2003/04	28 790	18 950	67 200	19 830
2004/05	29 500	19 600	68 400	20 110
2005/06	31 780	19 720	67 820	19 320
2006/07	32 490	20 150	67 750	18 410

- 0 | 6** What conclusions can be drawn from the data in the table? The quality of written communication will be assessed in this question. (9 marks)

- 0 7** Suggest **three** different reasons why the number of hospital admissions for each category of disease are not the same every year. *(3 marks)*

A Primary Care Trust (PCT) used a questionnaire to gather data about smoking, in order to plan how much treatment may be needed in the future for smoking-related diseases. The questionnaire required written responses to open and closed questions and was posted to all households in the PCT area.

- 0 8** Suggest **two** strengths of using a questionnaire to find out about smoking in the PCT area. *(2 marks)*

- 0 9** Suggest **two** weaknesses of using a questionnaire to find out about smoking in the PCT area. *(2 marks)*

- 1 0** Give **two** advantages of having open items in the questionnaire. *(2 marks)*

- 1 1** Give **two** advantages of having closed items in the questionnaire. *(2 marks)*

Question 3

A company has genetically engineered a new drug. The drug has been successfully tested and will be administered by mouth.

- 1 2** Explain what is meant by a genetically engineered drug. *(3 marks)*

- 1 3** Explain why the new drug must be tested before being made available. *(3 marks)*

- 1 4** Give **three** ways in which the new drug will be classified. *(3 marks)*

- 1 5** Give **two** reasons for the drug being administered by mouth. *(2 marks)*

- 1 6** Explain the principles of hospital nursing when providing intensive care. *(6 marks)*

- 1 7** Briefly explain what is meant by aseptic techniques. *(3 marks)*

Turn over for the next question

Turn over ►

Question 4

Susan is an adult female who needs laser surgery to correct short-sightedness. This will involve the use of a local anaesthetic.

- 1 8** Explain what is meant by laser surgery. *(4 marks)*
- 1 9** Explain what is meant by a local anaesthetic and why Susan will need it. *(4 marks)*
- 2 0** Discuss the ethical issues associated with patient choice and lifestyle in relation to medical treatment for disease and dysfunction. Include relevant lifestyle choices in your answer.
The quality of written communication will be assessed in this question. *(12 marks)*

END OF QUESTIONS