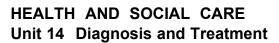
General Certificate of Education January 2009 Advanced Level Examination



HC14

AQA/

Tuesday 27 January 2009 1.30 pm to 3.30 pm

For this paper you must have:

• a 12-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 the answer book. Cross through any work you do not want to be marked.

## Information

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

#### Answer all questions.

There are 20 marks for each question.

- 1 Margaret's general practitioner (GP) physically examined her using palpation. The GP also looked at Margaret's medical records on a computer. Margaret was sent for a PET scan and tissue biopsy.
  - (a) (i) Outline how the GP will perform palpation and how it will help diagnose Margaret's disease or disorder. (5 marks)
    - (ii) Give three other common methods of physical examination the GP may use when examining Margaret. (3 marks)
  - (b) Apart from looking at medical records, outline **one** way in which the GP may use a computer to help Margaret. (2 marks)
  - (c) (i) Explain what is meant by PET scanning. (5 marks)
    - (ii) Describe how tissue biopsy is performed to provide information about disease or disorders. (5 marks)
- 2 A Primary Care Trust (PCT) collected the data in the table below from groups of individuals who have hypertension (high blood pressure).

	Men with hypertension		Women with hypertension	
Numbers in each age group	Having treatment	Not having treatment	Having treatment	Not having treatment
16–24 years	0	17	0	3
25–34 years	2 4	29 44	0 2	5 15
35–44 years				
45–54 years	11	37	8	22
55–64 years	24	53	18	35
65–74 years	35	61	36	52
75+ years	44	49	67	49

- (a) (i) What conclusions can be drawn from data in the table? (9 marks)
  - (ii) Describe **one** method for measuring blood pressure in order to detect hypertension. *(6 marks)*
- (b) Individuals with hypertension have choices including whether or not to have medical treatment.
   Explain why choices about medical treatment are important. (5 marks)

- 3 Many minor illnesses and injuries clear up by themselves, but in some cases self-treatment can help.
  - (a) Suggest three different types of self-treatment which individuals may use for minor (i) illnesses and injuries. (3 marks)
    - (ii) How can self-treatment help with minor illnesses or injuries? (2 marks)
  - Serious illnesses and injuries require hospital care. (b) Outline the advantages of hospital nursing compared to home nursing for individuals with more serious illnesses and injuries. (4 marks)
  - Explain what is meant by x-ray imaging. Refer to relevant scientific principles in (c) (i) your answer. (7 marks)
    - (ii) Give two advantages and two disadvantages of using x-ray imaging to diagnose injuries. (4 marks)
- 4 Ben needs minor surgery. This will be performed using aseptic techniques. Before surgery he receives a local anaesthetic drug by injection.

Explain what is meant by:

(a)

(a)	Explain what is meant by.				
	(i)	minor surgery	(3 marks)		
	(ii)	local anaesthetic drug.	(3 marks)		
(b)	(i)	Outline what is meant by aseptic techniques.	(2 marks)		
	(ii)	Outline why aseptic techniques are important for Ben's surgery.	(2 marks)		
(c)	What is the difference between local and general anaesthesia? (2 mark		(2 marks)		
(d)	Discuss the ethical issues associated with treating individuals whose lifestyles might reduce the effectiveness of the treatments they receive. Refer to <b>two</b> lifestyle choices in				

(8 marks) your answer.

# **END OF QUESTIONS**

# There are no questions printed on this page