

General Certificate of Education  
June 2007  
Advanced Level Examination



**HEALTH AND SOCIAL CARE  
Unit 14 Diagnosis and Treatment**

**HC14**

Tuesday 19 June 2007 9.00 am to 11.00 am

**For this paper you must have:**

- a 12-page answer book.

Time allowed: 2 hours

**Instructions**

- Use blue or black ink or 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 are reminded of the need for good English and clear presentation in your answers. Quality of Written Communication will be assessed in answers written in continuous prose.

Answer **all** questions.

Each question carries 20 marks.

1 General Practitioners (GPs) sometimes use percussion and blood pressure measurements to help diagnose medical problems.

(a) (i) Outline the basic method of percussion that a GP would use and the scientific principle on which it is based. *(6 marks)*

(ii) Describe how a GP would take blood pressure measurements using a sphygmomanometer. *(9 marks)*

(b) Marcie is pregnant. She is referred for an ultrasound scan.

Outline what is meant by ultrasound scanning and explain how it can be used to provide information about Marcie's pregnancy. *(5 marks)*

2 A survey of the incidence of cancer using equal numbers of adult males and females produced the data in the table below.

	Age groups surveyed (years)					
	40–49	50–59	60–69	70–79	80–89	Total of all age groups with cancer
Males with cancer	597	1793	3556	4759	3070	13 775
Females with cancer	1023	2284	3820	3542	3519	14 188

(a) Analyse the data to draw conclusions about the incidence of cancer in adult males and females of different ages in this survey. *(8 marks)*

(b) (i) Outline what is meant by radiotherapy and explain how it can be used to destroy cancer. *(5 marks)*

(ii) Give **two** different side-effects of radiotherapy treatment. *(2 marks)*

(c) Explain why it is important for patients to be given choice about the medical treatment they receive. *(5 marks)*

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- 3 Alex is referred by his GP to his local hospital for further investigation using computed tomography (CT) scanning. Following this, Alex receives treatment as an inpatient at the hospital.
- (a) (i) Explain how computed tomography scanning is performed and how it may provide information about Alex's medical condition. *(9 marks)*
  - (ii) Give **one** advantage and **one** disadvantage of using computed tomography scanning. *(2 marks)*
  - (b) Discuss the advantages and possible disadvantages of Alex's nursing care as an inpatient at the local hospital compared to informal care at home. *(9 marks)*
- 4 Some Health and Social Care students wish to collect information on treatments received by people in the local community.
- (a) (i) Suggest **two** different survey methods they can use to collect this information. *(2 marks)*
  - (ii) Give **one** strength and **one** weakness of each of the ways of collecting information which you have named in (a)(i). *(4 marks)*
  - (b) Explain what is meant by:
    - (i) aseptic techniques *(2 marks)*
    - (ii) local anaesthesia *(4 marks)*
    - (iii) micro surgery. *(3 marks)*
  - (c) Explain why some drugs must be administered by mouth while others are injected. *(5 marks)*

**END OF QUESTIONS**

**There are no questions printed on this page**