

General Certificate of Education
January 2008
Advanced Level Examination



HEALTH AND SOCIAL CARE
Unit 14 Diagnosis and Treatment

HC14

Monday 28 January 2008 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 Medical practitioners often consider patients' medical histories and will take their body temperatures during consultations about ill health.

- (a) (i) Give **two** different reasons why a medical history is considered. *(2 marks)*
- (ii) Briefly outline why taking body temperature is useful to medical practitioners. *(2 marks)*
- (iii) Suggest **four** different common physical examination techniques, other than taking temperature, that a medical practitioner may perform. *(4 marks)*

A General Practitioner (GP) decides to use a postal questionnaire to survey her patients and gather relevant data about service provision.

- (b) Give **one** strength and **one** limitation of using questionnaires for this purpose. *(2 marks)*
- (c) MRI is a diagnostic technique often used for brain scans, while radionuclide scanning is used in the diagnosis of thyroid gland problems.
- (i) Outline what is meant by MRI scanning and the basic principles of its use. *(5 marks)*
- (ii) Outline what is meant by radionuclide scanning and the basic principles of its use. *(5 marks)*

2 The following data about prescription items were recorded by a Primary Care Trust (PCT) during 2004 and 2005.

	Number of prescription items dispensed in 2004 and 2005	
	2004	2005
Nutrition and blood	7 675	7 000
Digestive disorders	18 010	17 005
Lung and chest problems	17 850	17 810
Hormone imbalance	19 500	18 020
Central nervous system disorders	41 710	41 695
Heart and circulation problems	72 665	70 100

- (a) What conclusions can be drawn from the data in the table? *(9 marks)*

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- (b) Many minor illnesses do not require prescription items but can be effectively self-treated with non-prescription (over-the-counter) drugs.
- (i) Suggest **three** different ways non-prescription (over-the-counter) drugs may be administered. *(3 marks)*
 - (ii) Suggest **two** different self-treatments for minor illnesses which do not involve the use of drugs. *(2 marks)*
- (c) (i) Give the **three** ways in which drugs are classified. *(3 marks)*
- (ii) Explain what is meant by a 'genetically-engineered' drug. *(3 marks)*

3 Adrian needs dialysis treatment because of kidney failure. Body fluid sampling was used to help diagnose his problem. Adrian is hoping to receive a kidney transplant. This would be done under general anaesthesia using aseptic techniques.

- (a) (i) Explain the broad principles of dialysis. *(4 marks)*
- (ii) Why is dialysis important for kidney failure sufferers such as Adrian? *(3 marks)*
- (iii) Other than kidney disease outline, with reference to a named disease or disorder, how body fluid sampling can be used to provide useful medical information. *(3 marks)*
- (b) (i) Describe the broad principles of transplant surgery. *(4 marks)*
- (ii) Give a brief explanation of how aseptic techniques are used to protect patients during surgery. *(3 marks)*
- (iii) Explain what is meant by general anaesthesia. *(3 marks)*

4 (a) Explain what is meant by:

- (i) endoscopic surgery *(4 marks)*
 - (ii) laser surgery *(3 marks)*
 - (iii) radiotherapy. *(3 marks)*
- (b) Give **one** disadvantage of using radiotherapy. *(1 mark)*
- (c) Discuss the ethical issues associated with the treatment of tobacco-related diseases for those individuals who continue to smoke. *(9 marks)*

END OF QUESTIONS

There are no questions printed on this page