



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Education

Health and Social Care (Single and Double Award)

Specimen Assessment Materials and Mark Schemes

AQA ADVANCED SUBSIDIARY (SINGLE AWARD) GCE 8621
AQA ADVANCED SUBSIDIARY (DOUBLE AWARD) GCE 8623
AQA ADVANCED (SINGLE AWARD) GCE8626
AQA ADVANCED (DOUBLE AWARD) GCE 8629

Further copies of this specification booklet are available from:

Aldon House, 39 Heald Grove, Rusholme, Manchester M14 4NA.
Tel: 0161 953 1170 Fax 0161 953 1177

or

download from the AQA Website: www.aqa.org.uk

© Assessment and Qualifications Alliance 2005

COPYRIGHT

AQA retains the copyright on all its publications, including the specimen units and mark schemes/teachers' guides. However, the registered centres of AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to centres to photocopy any material that is acknowledged to a third part even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.

Printed in Great Britain by Stephen Austin and Sons Ltd., Caxton Hill, Hertford SG13 7LU

Contents

Advanced Subsidiary

Unit 1	Effective Caring	1
Unit 4	Child Development	8
Unit 5	Nutrition and Dietetics	15
Unit 6	Common Diseases and Disorders	23

A2

Unit 12	Human Development: Factors and Theories	29
Unit 13	The Role of Exercise in Maintaining Health and Well-Being	35
Unit 14	Diagnosis and Treatment	40
Unit 15	Clients with Disabilities	47

General Certificate of Education
Advanced Subsidiary Examination



Specimen Test Paper

HEALTH AND SOCIAL CARE
Unit 1 Effective Caring

HCO1

For this paper you must have:

- a 12-page answer book

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball-point pen. Use pencil only for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is HC01.
- Answer **all** questions.
- Fasten any supplementary sheets you use to the answer book before handing it to the invigilator at the end of the examination.

Information

- The maximum mark for this paper is 60.
- The marks for questions are shown in brackets.
- You will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy, punctuation and grammar will also be taken into account.

Answer **all** questions.

Each question carries 15 marks.

- 1** Matthew visits his GP, complaining of a sore throat. The GP soon finds that Matthew has a mild infection which he could easily treat himself.
- (a) Outline one responsibility listed in ‘Your Guide to the NHS’ which is designed to make the NHS work better. Refer to the example above. (3 marks)
- (b) Instead of visiting his GP, Matthew might have called NHS Direct. Outline **one** advantage and **one** disadvantage for Matthew of using this service. (4 marks)
- (c) It is sometimes difficult for individuals to visit their GP. Explain how the following can act as barriers to GP services:
- inadequate resources
 - physical difficulties. (8 marks)
- 2** While her mother is visiting a neighbour, Lucy, aged seven, has been making a salad, including lettuce, tomato, raisins and banana. When her mother returns, Lucy offers her the salad. Her mother snatches the bowl from her and empties it into the bin, shouting, “You’re a bad girl. Don’t ever touch my kitchen things again.”
- (a) Evaluate the way Lucy was treated by her mother. Refer to relevant life quality factors in your answer. (7 marks)
- (b) Give **one** ethical and **one** practical reason why children should be treated well. (2 marks)
- (c) Discuss **three** factors which contribute to the ill-treatment of children by parents. (6 marks)
- 3**
- (a) Describe and evaluate **one** type of service provision which would be suitable for an elderly person who is having difficulty with daily living tasks. (8 marks)
- (c) List **two** physical life quality factors and explain why these are particularly important for elderly people. (4 marks)
- (c) Using an example, explain what is meant by *autonomy*. (3 marks)

4 This question is about caring skills and techniques.

(a) Describe how *distraction* can be used when an infant is receiving an injection. (3 marks)

(b) Outline the value of *working alongside* a client and illustrate your answer with reference to a specific activity with:

- a four-year-old child
- an elderly person. (6 marks)

(c) It is Saturday night in an Accident and Emergency Unit and the waiting area is full. Shaun is waiting with his best friend, Ben, who has pains in his chest after a fight. Ben has been seen by the triage nurse and is waiting to see a doctor. Like most of the people waiting, Shaun and Ben are drunk. A nurse walks through the waiting area, fetching a cup of coffee for one of the senior house officers, who has been working all evening without a break. Shaun gets up and angrily confronts the nurse. He shouts, "My mate's been here for half an hour, badly hurt, and you lot don't care. You're just sitting round drinking coffee. I'm going to sort you out."

Discuss how the nurse should respond in this situation. You should consider relevant caring skills and techniques, and the nurse's own safety. (6 marks)

END OF QUESTIONS

Mark Scheme

Question 1:

(a) 2 marks for an accurate version of one of the listed responsibilities, or 1 mark for a less precise version. 1 mark for relating to example.

Sample answer: Care for yourself when appropriate (e.g. by treating sore throats at home) (2)

Matthew could have got some medicine from his local pharmacist (1)

3 marks

(b) 1 mark for identifying advantage, plus 1 mark for elaboration. Same for disadvantage.

Likely answers:

One advantage is that it would save time (1) Matthew would get advice immediately instead of having to wait for an appointment (1).

One disadvantage is that the advice or diagnosis might be wrong (1) because it is harder to diagnose problems when the patient is not present (1).

4 marks

(c) Up to 4 marks for explanation related to inadequate resources.

Up to 4 marks for explanation related to physical difficulties (to a maximum of 6 overall)

Likely explanations:

Inadequate resources can result in a patient not being able to get an appointment quickly, because there are not enough GPs to meet demand. This might be because of a shortage of trained GPs, or because of a shortage of money to employ GPs.

Physical difficulties can include living a long way from the GP surgery, transport being poor, surgery times which don't give much opportunity for appointments for people who work full-time, and mobility problems e.g. for people with disabilities.

8 marks

Total 15 marks

Question 2:

(a) 1 mark each (up to 3) for identifying actions and specifying that they are wrong, plus 1 mark each for relating this to a life quality factor. An additional mark for each evaluation may be given for a relevant example or elaboration.

Likely answers: (life quality factors are given in italics).

It was wrong for Lucy's mother to leave her alone (1) because of the risks to her *physical safety* (1) plus example of possible risk (1)

It was wrong for Lucy's mother to provide nothing for her to do (1) because people need *occupation* (1) plus example (1)

It was wrong for Lucy's mother to disapprove of her making the salad (1) because people need *approval* (1) e.g. in order to maintain self-esteem (1)

It was wrong for Lucy's mother to forbid her from using kitchen equipment (1) because children need *learning opportunities* (1) and this experience might discourage her (1)

It was wrong for Lucy's mother to call her a 'bad girl' (1) because this shows *lack of respect/is demeaning* (1)

7 marks

(b) 1 mark each for plausible reasons. Likely answers:

Ethical: Carers (such as parents) have a duty to maintain an acceptable quality of life for children.

Practical: Children who are well-treated tend to behave agreeably and co-operatively.

2 marks

(c) Candidates should identify and elaborate factors from either or both of the two categories listed below.

Factors internal to carers include: parents might be prejudiced against children in general; they might stereotype children as troublesome; they might lack motivation to respond to the child's needs; they might conform with inappropriate cultural norms, such as the belief that children benefit from harsh treatment; they might be pre-occupation with their own needs, for example if they are ill, experiencing relationship difficulties, poverty or stress; they might lack parenting skills because of inappropriate parental models, or inexperience.

Factors internal to clients include: children lack status and power, so it is easy to ill-treat them; children are sometimes too demanding for parents who lack resources; children are sometimes hostile, unreasonable and obstructive.

Also credit other plausible factors.

Band 1 5-6 marks

Answers which identify and coherently discuss three factors. Little inaccuracy or irrelevance.

Band 2 3-4 marks

Answers which succeed in identifying at least two relevant factors, with some accurate elaboration.

Band 3 1-2 marks

Answers which succeed in identifying at least one relevant factor, but which show little or no accurate elaboration.

6 marks

Total 15 marks

Question 3:

(a) 1 mark for identifying service, 3 marks for description plus 4 marks for evaluation (1 mark per point). Likely answers:

Home/domiciliary care; provided by care assistants or community nurses; including helping the person to get up/go to bed; cook meals; carry out cleaning/shopping; help to bathe person.

Evaluation: enables the person to stay in their own home; so maintains some independence; care is not provided at all times; provides social contact.

Day care; person spends a day at a day care centre; providing activities; and a meal.

Evaluation: enables the person to continue living at home; increases social contact; aids adjustment to residential care; part-time care only.

Residential/nursing home care; usually some staff with nursing qualification; accommodation either in single or shared bedrooms; including toileting; bathing; stimulating activities; and visiting.

Evaluation: more constant care; quicker response to health emergencies; better nutrition than likely if living at home; loss of independence/autonomy.

8 marks

(b) 1 mark each (up to 2) for correctly identifying factors, plus 1 mark each for explanation.

Likely answers:

Exercise (1) maintains mobility/fitness/prevents obesity/reduces risks from disease (1)

Nutrition (1) maintains health/body weight/reduces risk of disease (1)

Physical safety (1) reduces risk of injury/accident (1)

Hygiene (1) reduces risk of disease/increases social acceptability (1)

Physical comfort (1) reduces pain from conditions such as arthritis (1)

4 marks

(c) The ability/opportunity to influence/determine one's own situation/actions. Alternatively, being self-controlling/not being coerced. 1 mark. Plus 1 mark for example e.g. an old person being able to decide where they are going to spend their day.

3 marks

Total 15 marks

Question 4:

(a) 1 mark for evidence of understanding of term distraction, 2 marks for describing a clearly appropriate way of using this (or 1 mark for less specific description).

Likely answer: If the injection is in the left arm, the child's parent could point to an interesting picture or mobile to the child's right. (2) This will take the child's attention away from the needle (understanding of distraction) (1).

3 marks

(b) Likely answers:

Working alongside encourages the client to engage in the activity; helps to gain trust; provides social contact; enables the person to learn by modelling/observation.

With a four-year-old child you could play with modelling clay. With an elderly person you could join in an exercise session.

6 marks

(c) 1 mark per point for appropriate suggestions likely to include:

Avoid confrontation by adopting side-by-side position, avoid eye contact, speak calmly and quietly, recognise that the aggression is likely to be caused by anxiety, reassure Shaun that his friend is not in danger; give reasons for the delay, keep within range of CCTV camera/other staff, use personal alarm if necessary.

No more than 4 marks if the candidate fails to mention one of the issues specified i.e. (i) caring skills & techniques or (ii) safety.

No more than 4 marks if the candidate includes a suggestion likely to raise the emotional temperature, such as becoming indignant with Shaun or shouting back.

6 marks

Total 15 marks

Mark grid

Question and section	Assessment objectives			
	A01	A02	A03	A04
1(a)	2	1		
1(b)	2			2
1(c)	4	4		
2(a)				7
2(b)	2			
2(c)			6	
3(a)	4			4
3(b)	2	2		
3(c)	2	1		
4(a)	1	2		
4(b)		6		
4(c)			4	2
Totals	19	16	10	15
Percentages	32	26	17	25

Specimen Test Paper

HEALTH AND SOCIAL CARE Unit 4 Child Development

HC04

For this paper you must have:

- a 12-page answer book

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball-point pen. Use pencil only for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is HC04.
- Answer **all** questions.
- Fasten any supplementary sheets you use to the answer book before handing it to the invigilator at the end of the examination.

Information

- The maximum mark for this paper is 60.
- The marks for questions are shown in brackets.
- You will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy, punctuation and grammar will also be taken into account.

Answer **all** questions.

Each question carries 15 marks.

- 1** Marsha is a typical two-year-old. She is developing both gross and fine motor skills.
- (a) Give an example of one gross motor skill and **one** fine motor skill Marsha could perform (2 marks)
 - (b) Explain the differences between gross and fine motor skills. (3 marks)
 - (c) Object permanence is one aspect of Piaget's Theory of Cognitive Functioning. Describe a simple test that could be performed with Marsha to determine if she does or does not understand object permanence. (3 marks)
 - (d) Marsha is at the holophrase stage of language development.
 - (i) Explain, using **one** example, what is meant by the holophrase stage of language development. (3 marks)
 - (ii) Describe how Marsha's language will develop further to become fully-developed speech. (4 marks)
- 2**
- (a) Explain how education can affect a child's emotional and social development. (7 marks)
 - (b) Identify **two** different factors which may also affect a child's emotional and social development and outline how each may have an effect. (8 marks)
- 3**
- (a) Max plays alone and is largely unaware of other children.
 - (i) What is Max's stage of social play? (1 mark)
 - (ii) Describe **two** further stages of social play Max will demonstrate as he develops. Indicate in your answer the order in which the stages occur. (7 marks)
 - (b) Discuss how play may contribute to intellectual development. (7 marks)
- 4** A survey of non-fatal accidents and injuries occurring at home and requiring hospital treatment for children under 15 gave the following results.
- | | |
|-----------|------|
| Falls | 4350 |
| Burns | 178 |
| Scalds | 202 |
| Poisoning | 350 |
| Choking | 51 |
- (a) What conclusions can be drawn from this data about the different risks to children at home? (6 marks)

- (b) Give **three** different reasons to explain why this data may not be consistent with data obtained from other surveys of accidents and injuries to children. *(3 marks)*
- (c) Suggest **three** different ways to reduce the risk of toddlers falling in the home. *(3 marks)*
- (d) (i) Suggest **two** ways to reduce the risk of poisoning for toddlers in the home. *(2 marks)*
- (ii) Suggest **one** way to reduce the risk of burns for toddlers in the home. *(1 mark)*

END OF QUESTIONS

Mark Scheme

Question 1

- (a) Examples of gross motor skills - walk/run/climb stairs/jumps (1)
Fine motor skills - building up to 6 cube towers/manipulate simple jigsaw pieces/
turns door knob/play with threading toys (1)
2 marks
- (b) Gross motor skills large movements c.f. smaller movements of fine motor skills (1)
Gross motor skills controlled by large muscles c.f. small muscles of fine motor skills (1)
Gross motor skills are of whole body/relate to posture or involve large body part
movements c.f. smaller hand/finger only movements of fine motor skills (1)
Gross motor skills develop earlier (1) fine motor skills more accurate/precise (1)
max 3
- (c) Object permanence test - use suitable object e.g. toy - shown to Marsha (1) object
removed from sight e.g. covered by cloth (1) Marsha reaction noted - if shows
interest in object disappearance/looks for it - has object permanence (1)
3 marks
- (d)(i) Holophrase - one word stage (1) which may have more than one meaning (1) e.g.
car/cat or other object name (1) can mean where is the car - is there a car - I
want the car (1) may use pivot words (1) echoing carer (1) max 1 for example
3 marks
- (ii) Ref. to telegraphic stage (1) two/three word stage (1) abbreviated sentences (1)
with function words missing (1) example 'where mummy gone' (1) grammar
develops to become fully developed speech (1)
max 4

Total 15 marks

Question 2

- (a) Education - through process of learning/schooling if positive - raises self-esteem (1) raises self-
confidence (1) develops sense of responsibility (1) develops social skills (1)
from interactions with other children/adults (1) develops friendships (1) working relationships (1)
(Allow negative points as reasoned alternatives)
7 marks
- (b) Two from: social class/parenting/housing/culture/genetic influences/disease -
illness - disorder
max 2
- Allow three marks for each outline of how the factor has an effect e.g. social
class - ref. to different class/examples having (stereotypically) different attitudes/
values (1) priorities (1) affects social interactions AW (1) through personal
behaviour (1) and how others treat us (1)
max 3
- Parenting - if good - supports child emotionally AW (1) to develop confidence (1)
self esteem (1) helps develop social skills (1) allow negative alternatives
max 3
- Housing - space/whether overcrowded or not (1) influences stress levels (1) may

lead to emotional tension/depression (1) social interactions then affected AW (1)

Culture - norms/values of culture (1) learnt by child/copies from older family members (1) develops own attitudes/beliefs (1)

max 3

Genetic inheritance - may influence our personality (1) consequently self-concept (1) how we interact with others (1) how others treat us (1)

max 3

Disease/illness/disorders - may reduce self esteem AW (1) lower confidence (1) limit/affect social interactions (1) cause depression AW (1)

max 3

Total 15 marks

Question 3

(a)(i) Solitary play

1 mark

- (ii) Any 2 of these stages: Onlooker/spectator (1) - child watches others (1) may react but not join in (1)
Parallel play (1) - children play side by side (1) without interaction (1) typical 2-3 year olds (1) looks like not playing together - but separation might cause upset (1)

max 3

Associative play (1) - children interact with each other often in common activity (1) but might keep their own ideas separate from each other (1) may get arguments if own 'agenda' conflicts with the other child's (1)

max 3

1 mark for correct order

- (b) Ref. to: learning new skills (1) to solve problems (1) use imagination (1) develop memory (1) develop concepts (1) develop language (1) develop concentration (1) develop creativity (1) make decisions (1) encourage exploration/experimentation (1)

max 7

Total 15 marks

Question 4

- (a) Falls biggest risk (1) more than rest put together (1) choking is the least risk (1) accidents involving heat second most common (1) allow 1 mark for other numerical comparisons e.g. approx. 7 × more poisonings than choking (1) poisoning and heat injuries similar numbers (1) scalds slightly more likely than burns (1)

max 6

- (b) Any 3 of - sample sizes may vary (1) this survey deals with accidents/injuries requiring hospital treatment - others may not (1) methods of obtaining data may vary (1) timescales for surveys may vary and give different patterns (1) doesn't cover fatalities (1) different age groups/age profile in the samples (1)
max 3
- (c) Any 3 of - fit stair gates (1) avoid loose rugs (1) ensure toys/household objects put away/stairs kept clear (1) don't polish wooden floors (1) supervise children at play (1)
max 3
- (d)(i) Keep household chemicals out of reach (1)
Lock medicines in cabinets (1)
Supervise toddlers when in kitchens/bathrooms (1)
max 2
- (ii) fit fire guards/keep matches out of toddlers reach AW/turn hot pan handles inwards.
max 1

Total 15 marks

Mark grid

Question and section	Assessment objectives			
	A01	A02	A03	A04
1(a)		2		
1(b)	3			
1(c)		3		
1(d)(i)	3			
1(d)(ii)		4		
2(a)	3			4
2(b)	2			6
3(a)(i)		1		
3(a)(ii)		7		
3(b)	3			4
4(a)			6	
4(b)			3	
4(c)	3			
4(d)(i)	2			
4(d)(ii)	1			
Totals	20	17	9	14

Paper Total 60 Marks

Specimen Test Paper

HEALTH AND SOCIAL CARE Unit 5 Nutrition and Dietetics

HC05

For this paper you must have:

- a 12-page answer book

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball-point pen. Use pencil only for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is HC05.
- Answer **all** questions.
- Fasten any supplementary sheets you use to the answer book before handing it to the invigilator at the end of the examination.

Information

- The maximum mark for this paper is 60.
- The marks for questions are shown in brackets.
- You will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy, punctuation and grammar will also be taken into account.

Answer **all** questions.

Each question carries 15 marks.

- 1** Olwen is fifteen years old and eats an unbalanced diet.
She eats too much carbohydrate especially sugars, too much saturated fat and too little protein.
Her diet is low in iron and vitamins B1 and B3.

Explain the effects on Olwen of her diet

- (a) having too much carbohydrate (3 marks)
- (b) having too much saturated fat (3 marks)
- (c) having too little protein (3 marks)
- (d) being low in iron (3 marks)
- (e) being low in vitamins B1 and B3. (3 marks)

- 2** Ron is a forty-five-year-old male.
His typical daily diet and the Dietary Reference Values for males aged 19-49 are shown in the table below.

	Ron's daily diet	Dietary Reference Values Males 19-49
Energy (kJ)	9000	10,600
Protein (g)	57	55.5
Calcium (mg)	510	700
Vit A (μg)	770	750
Vit C (mg)	41	40
Fibre (g)	10	18

- (a) Use the information in the table to analyse Ron's typical daily diet. (6 marks)

- (b) Suggest, with reference to named foods, **three** different ways for Ron to improve his typical daily diet. (6 marks)
- (c) Describe in general terms how the Dietary Reference Values will be different for males in the over 50 year old category. (2 marks)
- (d) Suggest **one** factor other than age which helps determine the dietary needs of a male adult. (1 mark)

3 Some individuals choose a lifestyle which involves vegetarian or vegan diets.

- (a) Explain what is meant by:
- (i) a vegetarian diet (3 marks)
- (ii) a vegan diet. (2 marks)
- (b) Misha developed diabetes at a very early age. She must modify her diet because of this. Briefly outline how diabetes causes problems and explain how Misha must modify her diet. (10 marks)

4 A study of food poisoning associated with poor food hygiene produced the following data.

Causes of food poisoning	Number of cases in one year	Most common source of infection
Salmonella infections	3059	Poultry
Clostridium infections	900	Stews and gravies
Staphylococcus infections	103	Human hands

- (a) (i) Suggest **two** reasons to explain the very large number of salmonella infections. (2 marks)
- (ii) Suggest **one** reason to explain the relatively small number of staphylococcus infections. (1 mark)
- (b) Clostridium infections are usually caused by warm stews and gravies left to cool. Suggest **two** ways to reduce clostridium infections caused by warm stews and gravies. (2 marks)
- (c) Name **two** different client groups who are most at risk from food poisoning. (2 marks)

- (d) Explain why each of the following food regulations must be followed.
- (i) Waste food must be removed from food areas as soon as practicable. *(2 marks)*
 - (ii) Food not being processed or prepared must be covered. *(2 marks)*
 - (iii) Jewellery, such as rings, should not be worn when preparing food. *(2 marks)*
 - (iv) Hair should be covered by a suitable cap when preparing food. *(2 marks)*

END OF QUESTIONS

Mark Scheme

Question 1

- (a) risk of weight gain AW (1) diabetes (1) tooth decay (1) heart disease (1)
max 3
- (b) increase risk of heart disease (1) through increased blood cholesterol (1)
obesity AW (1)
3 marks
- (c) may restrict growth (1) repair/replacement of tissues (1) hormone production (1)
antibody production (1)
max 3
- (d) ref to anaemia (1) haemoglobin insufficient (1) for red blood cells (1) ref
to symptoms - pale (1) tired (1)
max 3
- (e) Carbohydrate metabolism affected (1) lack energy as a result (1) ref
deficiency problems - pellagra (B3) (1) photosensitive dermatitis (1)
Beri-Beri (B1) (1) causing peripheral nerve damage (1)
max 3

Total 15 marks

Question 2

- (a) Ref to: Too little energy/1600kj less than DRV (1) enough protein/similar
to DRV (1)
Too little calcium/190mg less than DRV (1) enough Vit A/similar to DRV (1)
enough Vit C/similar to DRV (1)
Too little fibre/8g less than DRV (1)
6 marks
- (b) (To increase energy) eat more carbohydrates/fats
Polysaccharides/Disaccharides/Monosaccharides/Starch/Sugars (1)
suitable example of any of above - root vegetables, cereals, fruits, butter (1)

(To increase calcium) eat more cheese/white bread/drink milk max 2
(To increase fibre) eat more cellulose rich foods (1) examples wholegrain
cereals, fruits, potato skins etc. (1)
6 marks
- (c) Energy levels slightly less (1)
Protein levels slightly less (1)
2 marks
- (d) Level of physical activity/state of health (1)
1 mark

Total 15 marks

Question 3

(a)(i) non meat eating AW (1) but may eat some animal food products (1) examples
- eggs/milk/cheese/butter etc (1) since animal not killed (1)
max 3

(ii) non meat eating AW (1) will not eat **any** animal product (1)
2 marks

(b) Ref to insufficient insulin (1) to control blood sugar (1) remove sugar into
body cells/liver/muscles (1) for storage (1) if uncontrolled - may excrete sugar
in urine (1) can cause coma/death (1) needs to inject insulin for control
max 5

Must limit carbohydrate AW intake (1) to prevent large rises in blood sugar (1)
therefore avoid sugar rich foods (1) eat low sugar alternatives (1) example -
diabetic chocolate (1) monitor food intake (1) not overeat (1)
max 5

Total 15 marks

Question 4

(a)(i) Any 2 of:
lots of poultry eaten
difficult to know if safe when cooked
maybe cooking from frozen
not thorough
poultry commonly carry salmonella
2 marks

(ii) People usually clean hands before handling food/ref food handling regulations
prevent ill people handling food (1)
1 mark

(b) Any 2 of:
cool stews/gravies quickly by stirring (1)
leave in cool place (1)
use wide, shallow pan to cool quicker (1)
leave to cool in small volumes(1)
NOT just cool quickly
2 marks

(c) Any 2 of:
infants
young children
elderly
those already ill.
2 marks

(d) (i) May attract vermin AW (1) which carry bacteria/microbes AW (1) spread
to work surfaces (1)
max 2

(ii) Open to flies/insects (1) spreading microbes (1) ref to fly/insect feeding/
excreting (1)

max 2

(iii) Rings harbour dirt (1) microbes transferred to food (1)

2 marks

(iv) Hair/dandruff falls (1) food contaminated (1) microbes transfer
from scalp (1)

max 2

Total 15 marks

Mark grid

Question and section	Assessment objectives			
	A01	A02	A03	A04
1(a)	3			
1(b)	3			
1(c)	2	1		
1(d)	2	1		
1(e)	1	2		
2(a)			6	
2(b)				6
2(c)				2
2(d)	1			
3(a)(i)	3			
3(a)(ii)	2			
3(b)		10		
4(a)(i)			2	
4(a)(ii)			1	
4(b)				2
4(c)	2			
4(d)(i)	1	1		
4(d)(ii)	1	1		
4(d)(iii)	1	1		
4(d)(iv)	1	1		
Totals	23	18	9	10

Specimen Test Paper

HEALTH AND SOCIAL CARE Unit 6 Common Diseases and Disorders

HC06

For this paper you must have:

- a 12-page answer book

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball-point pen. Use pencil only for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is HC06.
- Answer **all** questions.
- Fasten any supplementary sheets you use to the answer book before handing it to the invigilator at the end of the examination.

Information

- The maximum mark for this paper is 60.
- The marks for questions are shown in brackets.
- You will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy, punctuation and grammar will also be taken into account.

Answer all questions.

Each question carries 15 marks.

1 Victor has been diagnosed as having meningitis.

- (a) (i) What is meningitis? (3 marks)
- (ii) Which type of organism causes meningitis? (1 mark)
- (b) Describe the symptoms Victor is likely to show. (4 marks)
- (c) The organisms causing Victor's Meningitis probably travelled through his bloodstream from an infection elsewhere in the body.
- Give **two** different ways other disease-causing organisms can be transmitted into the body. (2 marks)
- (d) Explain why some individuals are more vulnerable to infection than others. (5 marks)

2 Zena has an allergy to grass pollen which causes sneezing and a runny nose.

- (a) Explain what is meant by an allergy and how Zena's symptoms are caused. (7 marks)
- (b) A summer study of allergy cases produced the following results.

Cause of allergy	Number of cases
Grass pollen	2002
Tree pollen	1500
House dust mites	156
Animal dander	857

- (i) Suggest, giving **one** reason, how the results would be different if the study was carried out in winter. (2 marks)
- (ii) Suggest why the numbers of grass pollen and tree pollen cases are greater than for the other three causes. (3 marks)
- (c) Explain how the cause of skin allergy can be determined by testing. (3 marks)

- 3 In a research project some Health and Social Care students conducted a survey by asking 30 different people in 3 different age groups about headaches. Each person was asked whether stress, a hangover, foods, travel or a stuffy atmosphere was the cause of their most recent headache.

The data obtained is shown below.

	CAUSES OF HEADACHES				
Age Groups	Stress	Hangover	Foods	Travel	Stuffy Atmosphere
Adolescent	20	5	1	2	2
Adult	15	3	2	2	8
Elderly	10	0	2	6	12

- (a) Analyse the data to draw conclusions about the causes of headaches in the different age groups. *(9 marks)*
- (b) Suggest **three** different ways to improve the students research. Give one different reason to explain why each suggestion is an improvement. *(6 marks)*

4. Kylie has astigmatism.

- (a) Explain what astigmatism is and what problem it will cause Kylie. *(5 marks)*

Kylie has also noticed that she has some skin problems. There are blackheads on her face and a localised, macular rash on her arms.

- (b) (i) Explain how the blackheads have formed on Kylie's face and suggest **two** ways Kylie may help prevent more forming. *(7 marks)*
- (ii) Explain what is meant by a localised macular rash. *(3 marks)*

END OF QUESTIONS

Mark Scheme

Question 1

- (a)(i) Inflammation AW (1) of the meninges (1) which cover the brain and spinal cord (1)
3 marks
- (ii) Bacteria/allow virus
1 mark
- (b) Fever (1) severe headache (1) nausea/vomiting (1) dislike of light (1) stiff neck (1) skin rash (1)
max 4
- (c) Via food (1) drink (1) poor hygiene practices (1)
Allow different examples of poor hygiene at 1 mark each
Not washing hands after using toilet/fingers in mouth after picking nose (1)
Sexual intercourse (1)
max 2
- (d) Ref. to age as a factor (1) young/old more vulnerable (1) state of health (1) related to effectiveness of immune system (1) aspects of lifestyle/hygiene practices (1) unprotected sex with numerous partners (1)
max 5

Total 15 marks

Question 2

- (a) Inappropriate response AW (1) by Zena's immune system (1) as grass pollen is an allergen (1) that to most people causes no response (1) caused by immune system sensitised (1) when exposed to allergen (1) producing antibodies (1) from lymphocytes (1) leads to histamine release (1) causing symptoms AW (1)
max 7
- (b)(i) Less pollen cases AW (1) as little/no tree/grass pollen produced in winter
2 marks
- (ii) Pollen airborne (1) reaches many vulnerable people AW (1) difficult to avoid/can avoid dust mites/animal dander more easily (1)
3 marks
- (c) Different allergens put on patch (1) attached to skin (1) weal/reaction indicates sensitivity (1)
3 marks

Total 15 marks

Question 3

- (a) Stress by far the major cause for both Adolescents and Adults (1) Elderly different in that stuffy atmosphere most common (1) but little more than stress (1)
Overall food least common cause (1) little difference/very low levels all age groups (1)
Stress decreases as cause as move into older age groups (1)
Stuffy atmosphere increases as cause as move into older age groups (1)
Travel same/similar Adolescents/Adults (1) much more common cause/ 3x more common cause in elderly (1)
Hangover decreases as cause as move into older age groups (1)
max 9
- (b) 1 mark for improvement - 1 mark for reason
Use larger sample (1) to become more representative of the age group (1) 2 marks
Ask about more than most recent headache AW (1) to avoid atypical results (1) 2 marks
Repeat the survey with same group at different time (1) to determine consistency/compare results - variance (1) 2 marks
Ask about other causes of headaches (1) to be more accurate (1) 2 marks
Any 3 improvements and linked reasons 3 x 2 = 6 marks
- Total 15 marks**

Question 4

- (a) Ref. to eye problem (1) cornea (1) not 'normal' curve AW (1) affects magnifying power (1) causing blurred vision (1)
5 marks
- (b)(i) Blocked (1) sebaceous (1) oil-forming gland (1) caused by a semi-solid (1) black-capped plug (1) due to increased oil secretion (1) ref. to part of acne (1)
max 5
- help prevent by - remove make up completely (1) wash skin well soap and water (1)
max 2
- (ii) Localised - means on small area only (1) macular means spots not raised/ at skin level (1) but different colour/texture (1)
3 marks
- Total 15 marks**

Mark grid

Question and section	Assessment objectives			
	A01	A02	A03	A04
1(a)(i)	3			
1(b)(ii)	1			
1(b)		4		
1(c)	2			
1(d)	5			
2(a)		7		
2(b)(i)				2
2(b)(ii)				3
2(c)	3			
3(a)			9	
3(b)			3	3
4(a)	4	1		
4(b)(i)		5		2
4(b)(ii)	3			
Totals	21	17	12	10

Specimen Test Paper

GCE HEALTH AND SOCIAL CARE

HC12

Unit 12 Human Development: Factors and Theories

In addition to this paper you will require:

- a 12-page answer book

Time allowed: 2 hours

Instructions

- Use a blue or black ink (or ball-point) pen. Pencil should only be used for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is HC12.
- Answer **all** questions
- Fasten any supplementary sheets you use to the answer book before handing it to the invigilator at the end of the examination.

Information

- The maximum mark for this unit is 80. The marks for questions are shown in brackets.
- You will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy, punctuation and grammar will also be taken into account.

Answer **all** questions
Each question carries 20 marks

- 1**
- (a) Name the three parts of the personality, according to Freud. *(3 marks)*
- (b) Tina is 6 months old. As soon as she feels hungry, she starts crying, as though she cannot wait to be fed. Glen is 3 years old. When he feels hungry he does not complain, as he knows it will soon be time for a meal. Tom is 7 years old. He finds a packet of biscuits in the school playground. He decides it would be wrong to eat the biscuits because they do not belong to him.
- Identify and describe the first three stages of Freud's theory of psychosexual development. Refer to the description above. *(9 marks)*
- (c) (i) Use Freud's theory of psychosexual development to give one explanation for the cultural transmission of sex differences in behaviour. *(4 marks)*
- (ii) Outline one criticism of this explanation for sex differences. *(4 marks)*
- 2**
- (a) Outline what is meant by operant conditioning. *(6 marks)*
- (b) Using an example, apply Skinner's Learning theory to explain the development of aggressive behaviour. *(4 marks)*
- (c) Evaluate Skinner's learning theory as an explanation of aggression. Refer to alternative explanations in your answer. *(10 marks)*
- 3**
- (a) State what is meant by object permanence. *(2 marks)*
- (b) Outline one test of object permanence designed by Piaget, and evaluate it in relation to Bower and Wishart's alternative version of the test. *(6 marks)*
- (c) Describe the main features of Piaget's stage of formal operations. Refer to one test relevant to this stage. *(6 marks)*
- (d) Outline the main differences between Piaget's and Vygotsky's views of cognitive development. *(6 marks)*
- 4**
- (a) Explain, using an example, what is meant by the following two features of genetically-influenced development:
- (i) universality *(2 marks)*
- (ii) occurrence during a critical or sensitive period *(2 marks)*
- (b) Give two other features of genetically-influenced development. *(2 marks)*
- (c) Discuss to what extent attachment is influenced by genetics. Refer to features of genetically-influenced development. *(6 marks)*
- (d) Discuss the implications of Bowlby's theory of attachment for child-rearing. *(8 marks)*

Mark scheme

Question 1

- (a) 1 mark each for Id, Ego, and Superego
(3 marks)
- (b) 1 mark for naming each stage, plus 1 for description and 1 for linking with the scenario. Likely answer:

Oral stage (1) from birth to 1 year/satisfaction from the mouth/self consists only of Id/demands immediate gratification (1). Tina is in this stage (1)

Anal stage (1) 1 to 3 years/satisfaction focussed on the anus/Ego develops during this stage/child can delay gratification/becomes more aware of external events (1). Glen is in this stage (1)

Phallic stage (1) 3-6 years/satisfaction from genitals/Oedipus/Electra conflicts/Superego develops during this stage (1). Tom is in this stage (1)

Accept description if implied by reference to the scenario e.g. “Tina is in the oral stage, as she is unable to delay gratification and cries whenever she is hungry.” would get 3 marks.

(9 marks)

- (c) (i) 1 mark per point up to 4. Likely answer:

During the phallic stage (1) a child identifies with his/her same sex parent (1) as a way of resolving the Oedipus/Electra conflict (1) identification leads the child to adopt the attitudes, values and behaviours of that parent (1). Accept other relevant points.

(4 marks)

- (ii) 1 mark per point up to 4. Likely answers:

A: Cultural transmission is not restricted to the influence of same-sex parents (1) other agents of socialisation also have an influence (1) plus example – media/peers (1) and opposite sex parents might also encourage sex differences in behaviour (1)

B: The explanation is implausible (1) little evidence that young children have sexual feelings for parents (1) other explanations are more plausible (1) e.g. social learning theory/genetic differences (1).

A range of other answers (or combination of different points from these two likely answers) is possible.

(4 marks)

Total 20 marks

Question 2

- (a) 1 mark per point up to 6. Likely points include:

A technique for changing behaviour (1) by means of reinforcement (1) e.g. lever pressing by a rat in a Skinner box (1). At first the lever is pressed accidentally (1). This is rewarded with a pellet of food (1) immediately (1) which increases lever-pressing behaviour (1). Other responses are ignored (1)

Also credit related descriptions of negative reinforcement and shaping.

(6 marks)

- (b) 1 mark per point, up to 4. Sample answer:

If an aggressive act is rewarded (1) aggression is likely to be reinforced/become more likely in future (1) For example, a child is praised by a parent (1) for fighting (1).

4 marks

- (c) 1 mark per point, plus up to 1 mark each for valid elaboration.

Likely positive points include:

The theory is plausible

The theory is well-supported by empirical studies

Likely negative points include:

Supporting evidence comes mainly from non-human studies

Supporting evidence comes from studies in artificial situations/not true to life/Skinner box studies lack ecological validity

The theory is not a complete explanation

Aggression can be learned even without being rewarded

Other plausible explanations included social learning theory

including the influence of modelling

and the extraction of cognitions from observed examples

and biological explanations

such as hormone levels, especially testosterone

The theory ignores genetic/maturational factors

10 marks

Total 20 marks

Question 3

- (a) Likely alternative answers

A: Knowing that (1) objects continue to exist independently of us/when unobserved (1)

B: The ability to react (e.g. by searching) (1) to the disappearance of a previously present object (1).

Accept answers with similar wording.

2 marks

- (b) Up to 3 marks for accurate description of Piaget's test... e.g. as follows:

A child is encouraged to play with a toy (1) when the child's attention is distracted the toy is covered up (1) and the child's reaction observed/if the child searches s/he has object permanence (1)

...plus 1 mark for evaluation e.g. as follows:

Piaget's test might not detect object permanence when it is present in younger children/leads to an underestimate of how early the ability is acquired (1)

... and up to 2 for details of Bower & Wishart's version as follows:

They waited until a child reached for a toy (1) then turned out the lights (1) and used an infra-red camera to observe child's reaction (1)

6 marks

- (c) Up to 4 marks for description, likely to include the following points: The ability to perform mental operations (1) plus example e.g. use algebra (1) abstract thought (1) plus example e.g. about concepts like democracy (1) hypothetical thought (1) plus example e.g. thinking what would happen if gravity repelled (1).

Plus up to 2 for identification/description of a test. Likely tests include: the third eye test (1) – if you could have an extra eye, where on your body would you like it – and why? (1)

6 marks

- (d) 1 mark per point up to 6. Some of the following points might be made.

Piaget emphasised the role of discovery learning (1) though individual play (1) whereas Vygotsky emphasised social learning (1) and instruction (1). Vygotsky believed that children could acquire many concepts from the surrounding culture (1) rather than discovering them independently (1).

Piaget emphasised development through stages (1) in a fixed sequence (1) whereas Vygotsky emphasised the role of adults facilitating learning (1) in the zone of proximal development (1).

Also credit the fact that their views were not very different (1) e.g. Piaget did not deny the role of social learning (1).

Some of these points might be made in terms of their different implications for aiding cognitive development.

6 marks

Total 20 marks

Question 4

- (a) (i) Up to 2 marks for: the development occurs in (almost) all children (1) e.g. babbling (1)

2 marks

(ii) Up to 2 marks for: the development can only take place within a limited ‘window’ of age (1) e.g. acquiring a first language becomes much harder after 10 years of age (1)

2 marks

- (b) 1 mark each for any 2 from:

presence at birth; development in an invariant sequence; similar timing of onset; relatively unchanging during lifespan.

2 marks

- (c) 1 mark per point, plus 1 mark each for relevant elaboration of each point.

The following points supporting genetic influence can be made:

A: Attachment is (almost) **universal**, plus elaboration e.g. almost all children form specific attachments to familiar people (usually parents)

B: The development of attachment follows an **invariant sequence**, plus elaboration e.g. starting with indiscriminate attachment, proceeding to specific attachment and then multiple attachments.

C: Attachment takes place during a **critical or sensitive period** (according to Bowlby), plus elaboration e.g. children reared for several years in an institution without opportunities for lasting attachments might find it more difficult to attach later to foster parents.

D: Attachment behaviour has survival value, plus elaboration e.g. begins when child is becoming mobile and acts to keep the child close to an adult/has become genetically built-in.

The following arguments against can be made:

E: Attachment is not **present at birth**, plus elaboration e.g. so it is possible that it arises through a learning process.

F: Evidence for a critical or sensitive period is not convincing – attachments can form later in childhood.

G: Genetics cannot provide the whole explanation, plus elaboration e.g. it requires the child to learn the appearance/smell/sound of the caregiver/quality of attachment depends on caregiver behaviour.

Answers that do not refer to any of the features (in bold above) – maximum 4 marks.

6 marks

- (d) Credit should be given for knowledge of relevant aspects of Bowlby's theory together with the implications of these for childrearing. 1 mark for identifying a feature of Bowlby's theory, 1 mark for accurate statement of each implication, 1 mark for each evaluative point, up to a total of 8.

Likely points include:

A: Monotropy – implication that children should be reared mainly by one caregiver – multiple attachments likely to be weaker attachments, plus evaluation – no evidence of weaker multiple attachments.

B: Importance of mother/female caregiver – implication that children should be reared mainly by women/mothers of young children should not go out to work, plus evaluation – some children more attached to fathers; some children thrive in day care.

C: Critical period – implication that child should be with same caregiver continuously for first few years of life, plus evaluation – evidence suggests that disturbances of attachment can have long-term harmful effects.

D. Family rearing – implication that children should be reared in families/fostering and adoption preferable to institutional rearing, plus evaluation – studies e.g. by Tizard et al. support this.

8 marks

Total 20 marks

Specimen Test Paper

HEALTH AND SOCIAL CARE

HC13

Unit 13 The Role of Exercise in Maintaining Health and Well-Being

For this paper you must have:

- a 12-page answer book

Time allowed: 2 hours

Instructions

- Use a blue or black ink or ball-point pen. Pencil should only be used for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is HC13.
- Answer **all** questions.
- Fasten any supplementary sheets you use to the answer book before handing it to the invigilator at the end of the examination.

Information

- The maximum mark for this paper is 80.
- The marks for questions are shown in brackets.
- The number of marks is given in brackets at the end of each question or sub-question.
- You will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy, punctuation and grammar will also be taken into account.

Answer all questions.

Each question carries 20 marks.

1 Brian and Jamal are both twenty-year-old males who have followed different training programmes for a number of years. Brian has a high VO₂ max while Jamal has developed excellent muscular fitness.

- (a) Explain what a high VO₂ max is and what it indicates about Brian. (10 marks)
- (b) Explain what excellent muscular fitness indicates about Jamal. (10 marks)

2 Rowena has a highly stressful job. She has been encouraged to take up regular exercise to help her cope.

- (a) Explain how regular exercise can help Rowena cope with high stress. (11 marks)
- (b) Rowena's BMI measurement is taken as an indicator of her fitness.
- (i) Describe how her BMI measurement will be calculated. (7 marks)
- (ii) Give one strength and one limitation of using BMI measurements as indicators of fitness. (2 marks)

3 Four healthy adult students had their pulse rates recorded at rest, during a short exercise period and for a short period after the exercise was stopped. Care was taken to make sure that each student performed the exercise at the same speed and in the same way. The results are shown below.

	PULSE RATES (bpm)			
	Student W	Student X	Student Y	Student Z
At rest	62	61	55	60
Exercise starts				
1 min	85	86	67	93
2 mins	119	117	92	130
3 mins	129	129	98	147
4 mins	139	138	102	155
Exercise stops				
5 mins	105	106	65	130
6 mins	82	83	54	115
7 mins	61	61	55	89

- (a) Explain why it is important to measure the students' pulse rates at rest. (4 marks)
- (b) Compare the results of the four students in terms of what they indicate about their fitness levels. (14 marks)

- (c) One of the students was found to have a lower than normal peak flow measurement. Suggest which student this is likely to be and what the peak flow measurement indicates. *(2 marks)*

- 4 Ronnie is thirty-six years old and very obese. He takes no regular exercise and has a very sedentary job as a computer operator.

Suggest a suitable programme to help Ronnie take regular exercise and outline the benefits he may gain from it. Start your answer with five principles of good practice and safety relating to exercise that Ronnie should observe. *(20 marks)*

END OF QUESTIONS

Mark Scheme

Question 1

- (a) High VO₂ max means a high measurement of aerobic fitness (1) being the volume of oxygen (1) in millilitres (1) taken in and used (1) per minute (1) by 1 kilogram of body weight (1) Brian therefore able to sustain work for long periods AW (1) allow example of activity - everyday life/sport (1) effective external respiration (1) effective oxygen transport from his lungs to his cells (1) and effective use of oxygen within the cell (1)

max 10

- (b) Jamal has high muscle strength (1) and stamina (1) ref. to high maximum strength (rarely used) (1) and dynamic strength/power (1) benefits his mobility (1) in terms of speed (1) balance (1) and/or endurance (1) benefits his flexibility (1) in terms of his whole body (1) or specific joints (1)

max 10

Total 20 marks

Question 2

- (a) Ref.to: Rowena's stress responses: improving physical effects of stress (1) reducing blood pressure (1) improving sleeping pattern (1) helps prevent indigestion (1) palpitations (1) 'muscular' aches/pains (1) improves intellectual effects (1) through improved concentration (1) improved decision making (1) improved emotional effects (1) by lowering anxiety (1)

11 marks

- (b)(i) Measure Rowena's height in metres (1) her weight in kilograms (1)

formula $\frac{\text{Weight}}{\text{Height}^2} = \text{BMI}$ (1)

Compare with gender specific tables/female table (1) which has ranges for normal, over, under weight (1) 'normal' results about 20± (1) further from normal range greater degree of overweight/obesity or underweight the person is (1)

7 marks

- (ii) Strength - standardised approach/quantitative AW/easy to do/ consistent/ show progression clearly (1)

Weakness - take no account of build/body fat content (1)

2 marks

Total 20 marks

Question 3

- (a) To compare resting rates (1) 'normal' 60-80bpm (range average 76bpm) for adults (1) lower rate indicates fitter person (1) also given relative starting point for later comparison/to determine speed of recovery AW (1)

4 marks

- (b) From resting rates Student Y lowest (1) suggests fittest of groups (1) Students W/X/Z very similar rates (1) **all** near bottom or 'normal' range (1)

Student Y rates lower throughout (1) recovery to resting rate quickest/2 mins c.f. at least 3 mins (1) therefore fittest of group (1) **very** fit individual (1) Student Z highest rates throughout (1) does not achieve recovery in 3 mins/ slowest recovery (1) therefore least fit (1) Student W/X similar pattern/raises in pulse rates (1) 'mid range' recovery/ 3 mins to recovery (1) fitter than Z/less fit than Y (1) W/X similar fitness levels (1)

14 marks

- (c) Student Z (1) bronchial problem/asthma sufferer/narrowing of the airways in the lungs (1)
2 marks

Total 20 marks

Question 4

Ref. to: Good practice and safety - medical check with GP/expert advice/ appropriate equipment/clothing/importance of warm-up/cool-down - warm down/correct use of monitoring equipment

max 5

Suitable programme for Ronnie - gentle exercise/preferably weight supporting/ examples swimming/cycling allow gentle walking/working well within physical limits/with very gradual increases in exertion/monitoring regular programme AW/ avoiding/overcoming barriers/examples of these - costs/work/low fitness level/ low confidence a possibility

Benefits - related to weight loss/appetite suppression/appetate mechanism easier to adjust/balancing energy equation/increase metabolic rate/less risk of certain diseases/disorders - e.g. heart disease - including physiological details of atherosclerosis/raised blood pressure/helps reduce cholesterol/HDL:LDL ratio improved/less strain joints/less risk hernia/gall bladder disease/type II diabetes

1–5 marks

Generally vague answers with minimal physiological detail.

Suggestions for the programme may be unrealistic in 1-3 mark answers and show little depth of understanding re points of increasing workload gradually/maintaining regularity/ overcoming barriers in 4–5 mark answers.

6–10 marks

More detailed and generally accurate responses generally outlining a suitable programme in 6–8 mark answers and providing some physiological details of how benefits obtained in 9–10 mark answers.

Clear answers relating to most of the suitability points for the 9-10 marks, 6-8 marks covering less.

11–15 marks

Very detailed and accurate accounts may be limited to 2/3 diseases/disorders for 11–13 marks, but covering most of the range outlined for 14–15 marks.

Programme suitable and supported with sound reasoning for both gradual incremental exertion/different nature of exercises at progressive levels and how barriers are overcome for 14–15 marks. Less detail for 11–13 marks in these areas.

15 marks

Total 20 marks

Mark grid

Question and section	Assessment objectives			
	A01	A02	A03	A04
1(a)	5	5		
1(b)	5	5		
2(a)	5	6		
2(b)(i)			7	
2(b)(ii)				2
3(a)				4
3(b)			14	
3(c)				2
4		5		15
Totals	15	21	21	23

General Certificate of Education
Advanced Level Examination



Specimen Test Paper

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

HC14

For this paper you must have:

- a 12-page answer book

Time allowed: 2 hours

Instructions

- Use a blue or black ink or ball-point pen. Use pencil only for drawing.
- 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.
- Fasten any supplementary sheets you use to the answer book before handing it to the invigilator at the end of the examination.

Information

- The maximum mark for this paper is 80.
- The marks for questions are shown in brackets.
- You will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy, punctuation and grammar will also be taken into account.

Answer **all** questions.

Each question carries 20 marks.

1 Gillian has a medical problem so she visits her General Practitioner (GP). The GP asks Gillian about her medical history and conducts a physical examination.

- (a) (i) Explain why the GP needs to find out about Gillian's medical history. (4 marks)
- (ii) Explain why the GP conducts a physical examination. (4 marks)

The GP decides to refer Gillian to the local hospital for further investigation using Magnetic Resonance Imaging (MRI).

- (b) (i) Explain how Magnetic Resonance Imaging (MRI) is used to diagnose medical problems. (11 marks)
- (ii) Give **one** advantage of using Magnetic Resonance Imaging rather than X-ray Imaging. (1 mark)

2 A survey of breast screening for cancer in women of different ages produced the data in the table below. Women who were suspected of having breast tumours were referred for further investigation using tissue biopsy.

Age Group	Number of Women screened	Number of Women referred for tissue biopsy
45 - 49	41150	850
50 - 54	441200	9100
55 - 59	380700	4900
60 - 64	300400	3850
65 - 69	78900	1600
70 and over	32050	670

- (a) Explain what tissue biopsy is and how it would help diagnosis. (5 marks)
- (b) Analyse the data to draw conclusions about breast screening and age. (10 marks)
- (c) The treatment for breast cancer often involves the use of radiotherapy. Explain how radiotherapy helps in cancer treatment. (5 marks)

- 3 Some Health and Social Care students devised a simple questionnaire to find out about drug treatments for common ailments of adults. The questionnaire was given to twenty adults who had used one or more drugs in the last few months.

The questionnaire asked the following.

- Your name
- What is the name of the drug you used?
- Was it a prescription drug?
- How did you take your drug?
- Did you have any side effects from taking the drug?

The questionnaire did not prove very successful.

- (a) (i) Suggest **five** different reasons why the questionnaire was not successful. *(5 marks)*
- (ii) Write **ten** different questions for the questionnaire which would help improve it. *(10 marks)*
- (b) Briefly explain why not all drugs can be, or need to be, taken by mouth. *(5 marks)*
- 4 (a) (i) Max has been prescribed a course of drugs. He is also a regular alcohol drinker. Briefly outline how Max's alcohol consumption may affect the effectiveness of his drug treatment. *(4 marks)*
- (ii) Explain why different individuals may react differently to the same medical treatment. *(4 marks)*
- (b) Discuss the ethical issues associated with the treatment for tobacco smoking related diseases for those individuals who continue to smoke. *(12 marks)*

END OF QUESTIONS

Mark Scheme

Question 1

- (a)(i) Ref. to: needing to know if suffered from illness/disorder previously (1) in order to clarify symptoms (1) to make provisional diagnosis (1) based on patients own views (1)
4 marks
- (ii) Physical examination needed to determine Gillian's symptoms (1) reduce list of possible diseases (1) move towards definite diagnosis (1) help determine appropriate treatment for her (1)
4 marks
- (b)(i) MRI: Gillian lies very still (1) inside large, hollow magnet (1) which creates a very powerful magnetic field (1) affects protons in Gillian's body (1) which line up parallel to each other (1) strong pulse of radio waves (1) knocks protons out of alignment (1) as protons realign (1) produce radio signals (1) picked up by receiver in scanner (1) computer converts these to two or three-dimensional image of area of Gillian's problem (1)
max 11
- (ii) Does not use ionising radiation which is harmful AW
1 mark

Total 20 marks

Question 2

- (a) Removal of tissue/cell sample (1) from breast from suspect tumour (1) either examined under microscope (1) or subjected to biochemical tests (1) to determine cellular abnormality/in this case cancerous nature of cells AW (1)
5 marks
- (b) 50-54 age group most tested (1) has highest numbers/referred for tissue biopsy (1) 55-59 and 60-64 have next highest numbers tested (1) with proportions roughly similar to each other sent for biopsy (1) much less proportion than 50-54 (1) smallest tested groups 45-49/70 and over (1) similar proportions referred (1)
Numbers tested suggests researches most concerned with 50-54/55-59/60-64 or 50-64 (1) proportions sent for biopsy similar in all groups except 55-59/60-64 where lower (1) may be due to large numbers already referred in 50-54 year old group (1)
Allow reasoned/numerical comparisons between any two groups if valid for 1 mark each
max 10
- (c) Radiotherapy uses ionising radiation (1) destroys or slows down development of abnormal cells (1) if given in correct dosage (1) normal cells suffer little/no long term damage (1) often used after surgery to destroy remaining abnormal cells (1)
5 marks

Total 20 marks

Question 3

- (a)(i) Lack of success due to: too few people to get good range of responses (1) lacks confidentiality by asking for name (1) not specific timescale/not same timescale for each adult (1) too few questions to provide detail (1) drugs have three names/may not recognise similar drugs (1) ailments not identified (1) adults may be very different - age/health etc. (1)
max 5

- (ii) 1 mark for each suitable additional item (no repetitions)
 e.g. What ailment/condition did you/do you have which needed drug treatment?
 Is your drug(s) on prescription or an over the counter drug?
 Please indicate if your drug is a tablet, liquid for drinking, taken by injection, cream, suppository or spray?
 What dosage of drug are you/did you take?
 Is the drug taken once/twice/three or more times a day? or only when needed?
 How effective was your drug treatment? Not at all/Not very effective/had some effect/effective/very effective.
 (If drug treatment successful) How quickly did the drug work/bring about relief?
 (If you experienced side effects) How much did the side effects discomfort you?
 Very little/a little/quite a lot/considerably.
 Have you used the drug(s) before?
 (If so) Did they bring about benefits as quickly as before?
 Did they have the same side effects/a similar level of side effect discomfort?
 (If over the counter drug) Did you stick to one brand of the drug or try different ones?
 (If yes) Did all brands have the same effect?
 Did you vary the dosage?
 (If prescription) Did your GP alter the dosage?

max 10

- (b) Digestive juices (1) can damage/destroy chemicals (1) therefore not reach target organs (1) e.g. some need circulation in blood to reach all body cells (1) skin creams can just be directly rubbed on (1) sprays directly applied into nose for respiratory conditions.

Allow max 3 examples

max 5 overall

Total 20 marks

Question 4

- (a)(i) Drinking alcohol is taking a drug (1) as such may interfere with the beneficial action of other drugs (1) causes damage to Max's body cells (1) so don't respond to drug AW (1) upsets his body chemistry (1) may cause adverse reaction of body to beneficial drug (1) e.g. cause drowsiness (1) and accidents (1)
max 4

- (ii) Effectiveness partly determined by: Different genetic make up AW (1) means differences in body chemistry (1) different life style choices (1) allow examples other than tobacco and alcohol - diet (1) exercise (1) aids/hinders treatment AW (1) age may be a factor (1) as may gender (1) as may body size (1)
max 4

- (b) Points may include - smoking is a lifestyle choice/addictive/causes life threatening diseases/lung and other cancers/heart disease/circulatory problems/expensive to treat/and if continue smoking treatment "wasted"/finite NHS resources/need for prioritisation?/but NHS entitle all to treatment/age/degree of problem may need to be considered/but serious nature of smoking related diseases demands early intervention AW.

Band 1 1–4 marks

Rather simplistic arguments, mainly one sided for 1/2 marks offering own viewpoint rather than discussion issues. Little detail offered, more in 3/4 answers with at least one valid point on either side. Own views, if offered, not reasoned.

Band 2 5– 8 marks

Generally valid points but still lacking some detail or coherence for 5/6 marks. At least two points either side of argument for 7/8 marks. Own views supported with reasoning rather than simply stated.

Band 3 9–12 marks

Sound answers in good detail will gain 9/10 marks but need to cover the majority of points both in detail and good reasoned coherence for 11/12 marks. Own views very well reasoned throughout.

12 marks

Total 20 marks

Mark grid

Question and section	Assessment objectives			
	A01	A02	A03	A04
1(a)(i)		4		
1(a)(ii)		4		
1(b)(i)	11			
1(b)(ii)				1
2(a)	3	2		
2(b)			10	
2(c)	3	2		
3(a)(i)				5
3(a)(ii)			10	
3(b)				5
4(a)(i)		4		
4(a)(ii)	4			
4(b)				12
Totals	21	16	20	23

General Certificate of Education
Advanced level Examination



Specimen Test Paper

**HEALTH AND SOCIAL CARE
Unit 15 Clients with Disabilities**

HC15

For this paper you must have:

- a 12-page answer book

Time allowed: 2 hours

Instructions

- Use a blue or black ink (or ball-point) pen. Pencil should only be used for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is HC15.
- Answer **all** questions.
- Fasten any supplementary sheets you use to the answer book before handing it to the invigilator at the end of the examination.

Information

- The maximum mark for this unit is 80.
- The marks for questions are shown in brackets.
- You will be assessed on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary, where appropriate. The degree of legibility of your handwriting and the level of accuracy, punctuation and grammar will also be taken into account.

Answer **all** questions.

Each question carries 20 marks.

1 Ludmila is 75 years old and lives alone. She has painful swelling in her joints which is so severe that her hands are misshapen and she finds it very difficult to use them. She can walk but only with difficulty and discomfort.

- (a) Suggest **one** medical condition which is likely to be the cause of Ludmila's symptoms. *(1 mark)*
- (b) Ludmila's treatment includes prescribed non-steroidal anti-inflammatory drugs and supervised exercise sessions three times a week at her home. She has recently been assessed for additional aids and adaptations to help with daily living tasks.

Which **three** practitioners are most likely to have been responsible for the provision described above? *(3 marks)*

- (c) Suggest **three** different aids or adaptations which would be appropriate for Ludmila's use in the bathroom and explain how each one could help her to be independent. *(6 marks)*
- (d) Discuss the importance of mobility for a disabled person's health and well-being. You should refer to at least **three** disability conditions that affect mobility. *(10 marks)*

2 Huw is an 11-year-old boy who has to use a wheelchair. During an assembly on his first day at secondary school, the head-teacher wheels him to the front of the hall and introduces him to the other schoolchildren. The head-teacher tells them about Huw's medical condition and asks them all to, "be nice to him".

During break times, schoolchildren can either play outside, or stay in the dining hall. Because wheelchair access within the school is not very good, Huw has to stay in his classroom at break times and his lunch is brought to him. For the first three weeks he has to use the girls' toilets because the boys' toilets are on a different floor.

- (a) Make **four** criticisms of the school's treatment of Huw, referring to principles of effective caring. *(12 marks)*
- (b) Describe **two** barriers which Huw might face at school as a result of prejudice. *(4 marks)*
- (c) List **four** adaptations which can be made in order to improve access for wheelchair users into and within schools. *(4 marks)*

3 Duchenne muscular dystrophy is a genetic condition.

- (a) List **four** symptoms of Duchenne muscular dystrophy. *(4 marks)*
- (b) Explain why Duchenne muscular dystrophy is much more common in boys than in girls. *(6 marks)*

- (c) Describe how the incidence of genetic disorders in the population can be reduced and discuss the practical and/or ethical difficulties involved. *(10 marks)*
- 4 Penny is 81 years old. She has recently been discharged from hospital where she was treated for a severe stroke which left her unable to speak. She lives alone, although her son and daughter live nearby and often visit her to help with daily living tasks.
- (a) Name the area of the brain where the stroke is most likely to have occurred and describe its location, including specifying which hemisphere. *(3 marks)*
- (b) Suggest **one** other likely effect of a stroke in this hemisphere on Penny's abilities. Justify your answer. *(3 marks)*
- (c) Suggest **two** NHS practitioners who are likely to help Penny to continue her recovery and outline how each one could help her. *(4 marks)*
- (d) Discuss the advantages and disadvantages of residential care for people with disabilities, compared with care in their own home. You should consider the effects both on clients and on providers of care. *(10 marks)*

END OF QUESTIONS

Mark Scheme

Question 1

- (a) Osteoarthritis (accept arthritis) (1)
1 mark
- (b) 1 mark each for: GP, physiotherapist, occupational therapist (accept any order)
3 marks
- (c) 1 mark each (up to 3) for a relevant aid/adaptation, plus 1 mark for explaining how each helps.
Likely answers include

<u>Aid</u>	<u>Helps by</u>
Extended tap handles/tap turners	Making taps easier to turn
Utensil cuff/gripper for toothbrush/razor	Making gripping easier and less painful
Walk-in bath/shower	Avoiding painful bending/personal hygiene
Bath/shower seat	Avoiding painful bending/personal hygiene
Toilet riser	Making it easier to regain standing position
Grab rails	Making it easier to regain standing position

Accept other aids consistent with the scenario.

6 marks

- (d) 1 mark for clear implication (possibly by referring to mobility aids) that mobility refers to ability to move self around.
1 mark each (up to 3) for identification of relevant disabilities.

1 mark each for identifying reasons why mobility is important plus up to 2 marks each for explanation.
Likely reasons include: mobility may increase social contact, provides exercise which benefits health, contributes sense of empowerment, enables independence.

Maximum of 8 marks if only one type of disability is mentioned.

10 marks

Total 20 marks

Question 2

- (a) 1 mark each (up to 4) for identifying criticisms plus 1 mark each for relating each criticism to a care principle/quality of life factor. 1 further mark each for detail of explanation.

Likely criticisms:

C1 Huw's choices were limited (1) for example by not being able to choose where to spend his break times (1) because of access difficulties (1)

C2 The head-teacher told the other pupils about Huw's medical condition (1) this breached confidentiality (1) and was unnecessary for them to know (1)

C3 Huw was treated differently from other pupils by being taken to the front of the hall (1) this was unfair discrimination (1) on the basis of disability (1)

C4 Huw was denied social contact (1) because he had to stay in the classroom while other pupils went elsewhere (1) this would make it harder for him to make new friends (1)

C5 Huw was probably embarrassed/lost dignity (1) because he had to use the girls' toilet (1)

C6 Huw was denied stimulation (1) by not being able to play outside (1)

12 marks

(b) 1 mark for identifying each barrier (up to 2) plus 1 mark each for elaboration.

Likely answers:

B1 Other pupils might avoid him/not make friends with him (1) because they assume he is not like them/do not feel confident of how to respond to him (1)

B2 Teacher's might stereotype him as disabled (1) and lower their expectations/demands on him for learning/achievement (1)

4 marks

(c) 1 mark each for any four from: widening doorways/corridors; building ramps to bypass steps; providing lifts; installing automatic doors; lowering work surfaces and cupboards used in practical activities; lowering doorhandles; placing switches/plugs at waist level.

4 marks

Total 20 marks

Question 3

(a) 1 mark each for any four from: Wide waddling gait/weakness in hip muscles; delay in walking; climbing stairs on all fours; frequent falls/needs help to stand; lower leg appears muscular but is swelled by fibrous/fatty tissue; wasting of muscles; frequent tiredness/lack of motivation esp. at school; muscle contractures; limbs impossible to straighten; curvature of spine; and resultant collapse of lung; and respiratory problems; some intellectual impairment

4 marks

(b) 1 mark per point for explanation which should include most of the following points:

It is more common in boys because it is caused by the presence of one recessive gene (1) which is carried on an X sex chromosome (1). Boys have only one X sex chromosome (1) so that only one recessive gene is necessary for expression of the condition (1). Girls who have two X sex chromosomes (1) are less likely to develop the disease because they would have to have the recessive gene on both sex chromosomes (1) which could only happen if both parents passed on the disease gene (1) and this is unlikely because the father would have the condition himself (1)

max 6

(c) Up to 4 marks for description, including 1 mark each for identifying ways of reducing the incidence, plus up to 2 each for additional detail and 1 mark for identification of one other genetic disorder (apart from muscular dystrophy). max 10

Up to 6 marks (1 mark per point) for discussing issues relevant to the way(s) identified.

max 10

Ways and issues include;

W1: Genetic counselling – advising potential parents on the probability of having a child with the condition in the hope that they will decide not to have (more) children. Practical difficulty – some genetic conditions are not detected until after early adulthood/genetic screening to identify risk would be expensive. Ethical difficulty – might be seen as an infringement of individual's right to choose parenthood, and as discrimination against people with impairments.

W2: Sterilisation – surgically preventing woman from becoming pregnant (either by female sterilisation or male vasectomy). Practical difficulty – impossible to reverse in some cases. Ethical difficulty – might be seen as an infringement of individual's right to choose parenthood and as discrimination against people with impairments.

W3: Abortion of foetuses in which a disorder has been detected – following an ante-natal test. Practical difficulty – difficult to be certain if condition is present early enough for abortion to take place. Ethical difficulty – assuming foetus has a right to life, abortion is unethical killing, risk of emotional harm to parents, objectionable to some religious and political groups and might be seen as discrimination against people with impairments.

W4: Egg screening and implantation – removing eggs from woman, genetically screening them and rejecting those with genes for the condition, artificially fertilising and re-implanting the remaining eggs. Practical difficulty – very time-consuming and expensive. Ethical difficulty - objectionable to some religious and political groups and might be seen as discrimination against people with impairments.

Total 20 marks

Question 4

- (a) The speech/language production area (1) in the frontal lobe (1) of the left cerebral hemisphere (1)
3 marks
- (b) Loss of movement/paralysis of muscles (1) in the right side of her body/face (1) which is controlled (by the motor area) also in the left frontal lobe (1)
3 marks
- (c) 1 mark for identification of each practitioner, (up to 2), plus 1 mark each for description.
Likely answers (which must be NHS practitioners).
Speech therapist (1) to encourage Penny to make and shape speech sounds (1)
Physiotherapist (1) to provide treatment such as exercise to restore mobility (1)
4 marks

- (d) The following points are likely to be made:

Advantages for clients include:

A higher standard of personal care
Greater personal security/supervision/protection
Social contact
Access to a wider range of facilities/equipment

Disadvantages for clients include:

Loss of freedom/personal autonomy/disempowerment
Loss of privacy
Increased risk of dependency
Reduced contact with friends/family
Lack of stimulation
Frequent change of carer

Advantages to providers include

Economies of scale
Greater control over clients
Increased ability to plan
Less demand on informal carers

Disadvantages to providers include

Greater cost of provision
Need to staff 24 hours per day

Do not credit factors which do not differ between the two care settings e.g. low pay, unsocial hours.
If candidate makes the same point twice - e.g. as an advantage of residential care and a disadvantage of home care, only credit once.

Band 1 8–10 marks

Answers which give a balanced view of residential care, reveal accurate knowledge of the differences between the two care settings, and consider advantages and disadvantages to providers as well as clients.

Candidates are likely to refer to the fact that the most appropriate care depends on the client's needs.

Band 2 4–7 marks

Largely accurate answers which may be somewhat unbalanced - perhaps by dwelling more on the advantages than the disadvantages.

Answers which are in the form of a list or which fail to consider the effects on providers, but are otherwise adequate, are likely to fall into this band.

Band 3 1–3 marks

Answers in this band are likely to be based on a simplified view of the two care settings, and so tend to be overstated, overgeneralised or unsupported with relevant information.

Alternatively, answers which consider only advantages or only disadvantages to only one of the groups (clients, carers) involved.

10 marks

Total 20 marks

Mark grid

Question and section	Assessment objectives			
	A01	A02	A03	A04
1(a)		1		
1(b)			3	
1(c)		6		
1(d)	4			6
2(a)			8	4
2(b)	4			
2(c)		4		
3(a)	4			
3(b)			6	
3(c)	4			6
4(a)		3		
4(b)			3	
4(c)		4		
4(d)				10
Totals	16	18	20	26