



ASSESSMENT and  
QUALIFICATIONS  
ALLIANCE

## **General Certificate of Education**

## **Health and Social Care**

**8621/8623/8626/8627/8629**

**HC15**

## **Mark Scheme**

*2010 Specimen Paper*

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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### Quality of written communication

The quality of written communication is assessed in all assessment units where candidates are required to produce extended written material. Candidates will be assessed according to their ability to:

- Select and use a form and style of writing appropriate to purpose and complex subject matter
- Organise relevant information clearly and coherently, using specialist vocabulary when appropriate
- Ensure that text is legible, and that spelling, grammar and punctuation are accurate, so that meaning is clear.

The assessment of quality of written communication must be included in **questions 1 (c), 1(d) and 2(b)(ii)**.

#### Question 1

(a) Down's syndrome 1 mark  
 No response worthy of credit 0 marks

(b) 1 mark for naming an appropriate test, plus up to 2 marks for description, depending on detail and accuracy.

Likely answers:

**Chorionic villus sampling (1)**

A sample is taken of the (lining of the) placenta (1)

either using a needle through the woman's abdomen or a catheter through the cervix (1)

at around 10 weeks into pregnancy (1)

The tissue sample is tested for chromosomal abnormalities. (1)

**Amniocentesis (1)** A needle is inserted through the woman's abdomen into the uterus/and amniotic sac (1)

positioned with the aid of an ultrasound scan (1)

A sample of the amniotic fluid in the sac is taken (1)

at around 15/16 weeks into pregnancy (1)

The tissue sample is tested for chromosomal abnormalities (1) 3 marks

No response worthy of credit 0 marks

(c) Answers are likely to point out that a positive test for Down's syndrome often leads to a decision to abort the foetus. Ethical arguments against are likely to include: equating abortion with taking human life, so morally wrong; the risk of false positives (leading to abortion of unaffected foetuses); this is in effect discrimination against people with disabilities – places a lower value on their lives; and the 'playing God' argument.

Ethical arguments in favour and counter-arguments include: poor quality of life that might result for the child and the parents. 'Playing God' arguments could equally be applied to any medical intervention, and carry little weight among atheists.

Answers might also refer to the risks to the foetus of the actual test.

Mark ranges

0 marks

No response worthy of credit.

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### 1-3 marks

Answers that show some awareness of the issue (e.g. the link to abortion) or which include some basic reference to the ethical arguments resulting from this. These answers are likely to be brief, or only loosely focussed on the question.

Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band,

### 4-6 marks

Answers that give some reasonably coherent ethical arguments. These answers may lack detail, may be over-dogmatic or one-sided.

There is some relevant technical information and /or terminology.

Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band.

### 7-8 marks

Answers that present coherent and well-structured arguments for both sides of the ethical issue. Supporting technical information e.g. about foetus viability or reliability of tests, is accurate.

Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band.

(d) Answers are likely to refer to negative affects on school achievement such as: delayed development of language and other cognitive skills; lower than average achievement e.g. in tests.

Discussion points are likely to explain why this low achievement is likely, e.g. the direct effects of lower than average intelligence, and indirect effects such as the low expectations of staff, and negative effects on self-esteem resulting from social comparison or teasing by other children, leading to reduced motivation.

Counter arguments might refer to mitigating factors including special educational provision e.g. support worker, and to the resilient, cheerful personality often found in people with Down's syndrome.

### Mark ranges

#### 0 marks

No response worthy of credit.

### 1-3 marks

Answers that show some awareness of basic likely effects. These answers are likely to be brief, or inaccurate (e.g. confusing Down's syndrome with the effects of another condition). Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band.

### 4-6 marks

Answers that feature some basic understanding of the effects of Down's syndrome on academic achievement and some valid discussion.

There is some relevant technical terminology, e.g. reference to a SENCO or statementing.

Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band.

### 7-8 marks

Answers that present a coherent and well-structured analysis of a range of effects on achievement, and which recognise indirect as well as direct effects and mitigating factors. The answer demonstrates understanding of the effects of Down's syndrome and of relevant educational provision.

Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band.

## Question 2

(a) 1 mark for identification of relevant disability, plus 1 mark for specific reason.

- deafness (1) because there is often a lot of background noise (which is excluded by switching the aid to the induction loop setting ) (1)
- osteoarthritis/multiple sclerosis (1) because of pain/tremor/difficulty in gripping objects (1)
- muscular dystrophy (1) to aid standing/mobility (1)

6 marks

No response worthy of credit

0 marks

(b)(i) Up to 2 marks for defining each term. In each case a basic definition plus some elaboration, possibly including an example is acceptable.

Likely answers:

(Ignorance) – lack of knowledge (1) e.g. because of lack of contact/lack of education/learning of inaccurate stereotypes (1)

(Prejudice) – negative attitude (1) featuring dislike/avoidance/discrimination (1)

(Discrimination) treating disabled people less favourably (1) e.g. in recruitment (1)

6 marks

No response worthy of credit

0 marks

(b)(ii) Answers are likely to refer to suggestions such as: increased integration in schools and society in general, e.g. the world of work; public education, e.g. increased public exposure of people with disabilities in the media and sport; the effects of legislation, such as the Disability Discrimination Act and the NHS and Community Care Act.

These suggestions may be specifically linked to each of the named factors i.e. ignorance, prejudice and discrimination.

Mark ranges

0 marks

No response worthy of credit.

1-3 marks

Answers that refer to at least one relevant suggestion, but which tend to be repetitive and confused.

Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band.

4-6 marks

Answers that refer appropriately to several relevant suggestions, but do not apply these in detail. Some relevant knowledge e.g. of legislation, is present.

Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band.

7-8 marks

Coherent and well-structured answers that make appropriate, realistic and practical suggestions, elaborate these in a way that reveals good technical knowledge, specifically relating these suggestions to ignorance, prejudice and discrimination.

Relevant technical terminology is present.

Candidates who deploy appropriate knowledge and understanding and display higher QWC skills should be rewarded at the top of the mark band.

Conversely, those who display some confusion and weakness in QWC supporting knowledge and understanding should be placed at the bottom of the mark band.

**Question 3**

(a)(i) 1 mark per point, up to 2.

Likely points:

Loss of blood supply (1)

to (part of) the brain (1)

caused by a blood clot/thrombosis (1)

or by bleeding/haemorrhage (into the brain) (1).

2 marks

No response worthy of credit

0 marks

(a)(ii) 1 mark each, up to 2.

Likely answers: diet; lack of exercise; smoking, excessive/binge drinking of alcohol.

No response worthy of credit

0 marks

2 marks

(b)(i) Broca's area (1) frontal lobe (1) left hemisphere (1).

3 marks

No response worthy of credit

0 marks

(b)(ii) Loss of movement (1)

on the opposite/right hand side of the body/right arm/leg (1)

limiting mobility (1)

ability to feed herself etc (1)

sagging appearance in one side of face (1)

4 marks

No response worthy of credit

0 marks

(c) 1 mark for identifying a relevant LFQ (up to 3) plus 2 further marks, one of which can be awarded for explanation why this is lacking, plus 1 mark for suggestion.

Alternatively 2 marks may be awarded for a suggestion given in detail.

Several LFQs could be made relevant, including;

autonomy, psychological security, effective communication, physical safety/hygiene, exercise, physical comfort.

Accept others if made relevant, e.g. occupation.

9 marks

No response worthy of credit

0 marks

### Question 4

(a)(i) 1 mark for identification of effect (up to 2), plus 1 mark each for detail.

Likely answers:

- Poor lung function (1) caused by thick sticky mucus (1) leading to risk of respiratory disease, e.g. pneumonia (1) and fibrous cysts in the lungs (1)
- Digestive problems (1) because mucus obstructs pancreas (1) preventing enzymes reaching intestines (1) leading to poor weight gain (1)
- Sterility (1) in males (1).

4 marks

No response worthy of credit

0 marks

(a)(ii) 1 mark for identification of effect (up to 2), plus 1 mark each for detail.

Likely answers:

- Problems with education/learning/falling behind with school work (1) caused by frequent absences because of illness/treatment (1)
- Distress (1) caused by the nature of the condition/caused by the nature of daily treatment(1) especially in younger children (1)

Credit other valid psychological effects if convincingly argued; these might include low self-esteem and depression.

4 marks

No response worthy of credit

0 marks

(b) Up to 3 marks for each treatment, of which 1 must be for specifying the treatment and 1 must be for specifying practitioner.

Third mark for accurate detail.

Likely answers:

**Percussion** (1)

on the back (1)

to dislodge mucus (1)

carried out by physiotherapist (1)

**Antibiotics** (1)

to control lung infections (1)

prescribed by GP (1)

**Provision of dietary advice** (1)

diet high in protein/calories/vitamins/pancreatic enzymes (1)

given by a dietician (1)

6 marks

No response worthy of credit

0 marks

(c) Up to 4 marks as follows:

Mother: one dominant (unaffected) gene (1), one recessive (affected) gene (1)

Father: one dominant (unaffected) gene (1), one recessive (affected) gene (1)

4 marks

No response worthy of credit

0 marks

(d)(i) 25%

1 mark

(d)(ii) 50%

1 mark

No response worthy of credit

0 marks



## GCE Health and Social Care

<b>Examination Series: (Jan/June)</b>	<b>June</b>
<b>Year:</b>	<b>2008</b>
<b>Unit:</b>	<b>HC15</b>

Questions	Assessment Objectives				Total
	A01	A02	A03	A04	
1(a)		1			1
1(b)		3			3
1(c)				8	8
1(d)				8	8
2(a)		6			6
2(b)(i)	6				6
2(b)(ii)				8	8
3(a)	2	2			4
3(b)			7		7
3(c)			9		9
4(a)(i)	4				4
4(a)(ii)	4				4
4(b)			6		6
4(c)	4				4
4(d)(i)	1				1
4(d)(ii)	1				1
<b>Totals</b>	<b>18</b>	<b>16</b>	<b>22</b>	<b>24</b>	<b>80</b>
<b>Percentages</b>	<b>22.50</b>	<b>20</b>	<b>27.50</b>	<b>30</b>	<b>100</b>