GCE

Biology B

H422/01: Fundamentals of biology

A Level

Mark Scheme for June 2025

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

MARKING INSTRUCTIONS

PREPARATION FOR MARKING
RM ASSESSOR

1. Make sure that you have accessed and completed the relevant training packages for on-screen marking: *RM Assessor Online Training: OCR Essential Guide to Marking*.

2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are available in RM Assessor

3. Log-in to RM Assessor and mark the **required number** of practice responses ("scripts") and the **required number** of standardisation responses.

MARKING

1. Mark strictly to the mark scheme.

2. Marks awarded must relate directly to the marking criteria.

3. The schedule of dates is very important. It is essential that you meet the RM Assessor 50% and 100% (traditional 40% Batch 1 and 100% Batch 2) deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.

4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone, email or via the RM Assessor messaging system.

5. **Crossed-Out Responses**
   Where a candidate has crossed out a response and provided a clear alternative then the crossed-out response is not marked. Where no alternative response has been provided, examiners may give candidates the benefit of the doubt and mark the crossed-out response where legible.

   Rubric Error Responses – Optional Questions
   Where candidates have a choice of question across a whole paper or a whole section and have provided more answers than required, then all responses are marked and the highest mark allowable within the rubric is given. Enter a mark for each question answered into RM

Assessor, which will select the highest mark from those awarded. *(The underlying assumption is that the candidate has penalised themselves by attempting more questions than necessary in the time allowed.)*

Multiple-Choice Question Responses
When a multiple-choice question has only a single, correct response and a candidate provides two responses (even if one of these responses is correct), then no mark should be awarded (as it is not possible to determine which was the first response selected by the candidate).
When a question requires candidates to select more than one option/multiple options, then local marking arrangements need to ensure consistency of approach.

Contradictory Responses
When a candidate provides contradictory responses, then no mark should be awarded, even if one of the answers is correct.

Short Answer Questions (requiring only a list by way of a response, usually worth only one mark per response)
Where candidates are required to provide a set number of short answer responses then only the set number of responses should be marked. The response space should be marked from left to right on each line and then line by line until the required number of responses have been considered. The remaining responses should not then be marked. Examiners will have to apply judgement as to whether a 'second response' on a line is a development of the 'first response', rather than a separate, discrete response. *(The underlying assumption is that the candidate is attempting to hedge their bets and therefore getting undue benefit rather than engaging with the question and giving the most relevant/correct responses.)*

Short Answer Questions (requiring a more developed response, worth two or more marks)
If the candidates are required to provide a description of, say, three items or factors and four items or factors are provided, then mark on a similar basis – that is downwards (as it is unlikely in this situation that a candidate will provide more than one response in each section of the response space).

Longer Answer Questions (requiring a developed response)
Where candidates have provided two (or more) responses to a medium or high tariff question which only required a single (developed) response and not crossed out the first response, then only the first response should be marked. Examiners will need to apply professional judgement as to whether the second (or a subsequent) response is a 'new start' or simply a poorly expressed continuation of the first response.

6. Always check the pages (and additional objects if present) at the end of the response in case any answers have been continued there. If the candidate has continued an answer there, then add the annotation 'SEEN' to confirm that the work has been seen and mark any responses using the annotations in section 11.

7. There is a NR (**No Response**) option. Award NR (No Response):

   - if there is nothing written at all in the answer space
   - OR if there is a comment which does not in any way relate to the question (e.g., 'can't do', 'don't know')
   - OR if there is a mark (e.g., a dash, a question mark) which is not an attempt at the question.

   Note: Award 0 marks – for an attempt that earns no credit (including copying out the question).

8. The RM Assessor **comments box** is used by your Team Leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.**

9. Assistant Examiners will send a brief report on the performance of candidates to their Team Leader (Supervisor) via email by the end of the marking period. The report should contain notes on particular strengths displayed as well as common errors or weaknesses. Constructive criticism of the question paper/mark scheme is also appreciated.

10. For answers marked by levels of response:
    Read through the whole answer from start to finish, using the Level descriptors to help you decide whether it is a strong or weak answer. The indicative scientific content in the Guidance column indicates the expected parameters for candidates' answers but be prepared to recognise and credit unexpected approaches where they show relevance. Using a 'best-fit' approach based on the skills and science content evidenced within the answer, first decide which set of level descriptors, Level 1, Level 2 or Level 3, best describes the overall quality of the answer.

    Once the level is located, award the higher or lower mark:

    The higher mark should be awarded where the level descriptor has been evidenced and all aspects of the communication statement (in italics) have been met.

    The lower mark should be awarded where the level descriptor has been evidenced but aspects of the communication statement (in italics) are missing.

    In summary:

The skills and science content determines the level.

The communication statement determines the mark within a level.

Level of response questions on this paper are 32(d) and 34(b

11. Annotations

Annotation	Meaning
	Correct response
	Incorrect response
	Omission mark
	Benefit of doubt given
	Contradiction
	Rounding error
	Error in number of significant figures
	Error carried forward
	Level 1
	Level 2
	Level 3
	Benefit of doubt not given
	Noted but no credit given

Annotation	Meaning
	Ignore
	Blank page
	Extendable horizontal wavy line (to indicate errors / incorrect science terminology)
	Large dot (various uses as defined in the mark scheme)

12. Abbreviations, annotations and conventions used in the detailed Mark Scheme

Annotation	Meaning
I	alternative and acceptable answers for the same marking point
✓	Separates marking points
DO NOT ALLOW	Answers which are not worthy of credit
IGNORE	Statements which are irrelevant
ALLOW	Answers that can be accepted
( )	Words which are not essential to gain credit
__	Underlined words must be present in answer to score a mark
ECF	Error carried forward
AW	Alternative wording
ORA	Or reverse argument

13. **Subject-specific Marking Instructions**

INTRODUCTION

Your first task as an Examiner is to become thoroughly familiar with the material on which the examination depends. This material includes:

- the specification, especially the assessment objectives
- the question paper
- the mark scheme.

You should ensure that you have copies of these materials.

You should ensure also that you are familiar with the administrative procedures related to the marking process. These are set out in the OCR booklet **Instructions for Examiners**. If you are examining for the first time, please read carefully **Appendix 5 Introduction to Script Marking: Notes for New Examiners**.

Please ask for help or guidance whenever you need it. Your first point of contact is your Team Leader.

Section A

Question	Answer	Marks	AO element	Guidance
1	C	**1**	AO1.1	
2	B	**1**	AO1.2	
3	C	**1**	AO1.1	
4	A	**1**	AO2.2	
5	D	**1**	AO2.6	
6	B	**1**	AO1.1	
7	D	**1**	AO1.1	
8	B	**1**	AO2.6	$(3x10^5 \times 2.5x10^8 \times 2 \text{ lungs}) / 1x10^9$
9	A	**1**	AO1.2	
10	D	**1**	AO2.5	
11	B	**1**	AO1.1	
12	D	**1**	AO2.7	
13	C	**1**	AO2.6	$(40 \text{ mg Kg}^{-1} \times 10\text{Kg}) / 2$
14	D	**1**	AO1.2	
15	A	**1**	AO1.1	
16	C	**1**	AO1.2	
17	A	**1**	AO2.6	(1100/75) / 2
18	B	**1**	AO2.5	
19	B	**1**	AO1.1	
20	C	**1**	AO2.8	65 x 0.95
21	C	**1**	AO2.5	
22	D	**1**	AO1.1	
23	A	**1**	AO2.7	
24	C	**1**	AO1.2	

25	B	**1**	AO1.2	
26	D	**1**	AO1.1	
27	D	**1**	AO2.6	
28	C	**1**	AO1.1	
29	D	**1**	AO1.2	
30	A	**1**	AO1.1	
	Total	**30**		

<table>
<tr><th colspan="3">Question</th><th>Answer</th><th>Marks</th><th>AO element</th><th>Guidance</th></tr>
<tr><td>31</td><td>(a)</td><td></td><td>
<table>
<tr><th>Structure</th><th>Function</th><th>Letter on Fig. 31.1</th></tr>
<tr><td>Cerebellum</td><td>(control of) muscle coordination / balance / non-voluntary movement</td><td>R</td></tr>
<tr><td>medulla (oblongata)</td><td>Controls activities such as heart rate and blood pressure.</td><td>S</td></tr>
<tr><td>hypothalamus</td><td>(role in) thermoregulation / osmoregulation / homeostasis / hormone secretion</td><td>T</td></tr>
</table>
one mark for each correct row ✓✓✓
</td><td>3</td><td>AO2.1</td><td>ALLOW fine motor control

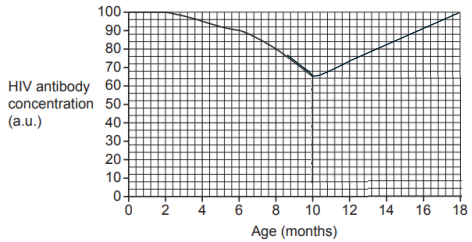
ALLOW thalamus
ALLOW control of, hunger / thirst / sleep cycles
ALLOW named hormones e.g. thyroid stimulating hormone
IGNORE ADH</td></tr>
<tr><td>31</td><td>(b)</td><td>(i)</td><td>W peripheral (nervous system)
AND
X somatic (nervous system) ✓</td><td>1</td><td>AO1.1</td><td>BOTH required for 1 mark
ALLOW phonetic spelling

IGNORE central / voluntary</td></tr>
</table>

Question			Answer	Marks	AO element	Guidance
31	(b)	(ii)	autonomic uses , acetylcholine and noradrenaline / two different neurotransmitters ✓ autonomic branches into, (two) other nervous systems / sympathetic and parasympathetic ✓ autonomic has two neurones linking CNS with effector ✓ autonomic neurones are (only) myelinated, between ganglion and CNS / on the preganglionic neurone ✓	**2 max**	AO1.1	**ALLOW** autonomic branches into **Y** and **Z** **ALLOW X** / somatic , only has one neurone linking CNS with effector / muscle **ALLOW** autonomic neurones are not fully myelinated / AW **ALLOW** somatic / **X** , neurones are myelinated (along the length of axon) **ALLOW** somatic / **X** , only uses , correctly named neurotransmitter / one neurotransmitter
31	(b)	(iii)	negative feedback ✓ (**Y** and **Z** are the) parasympathetic **and** sympathetic nervous systems ✓ parasympathetic active during , rest / relaxation **and** sympathetic active in stressful / fight or flight situations ✓ appropriate example ✓✓	**3 max**	AO1.2	**ALLOW 2 max** e.g. parasympathetic constricts / sympathetic dilates the bronchioles e.g. parasympathetic slows heart rate / sympathetic increases heart rate

Question			Answer	Marks	AO element	Guidance
						e.g. parasympathetic constricts / sympathetic dilates the bronchioles e.g. parasympathetic slows heart rate / sympathetic speeds it up e.g. parasympathetic relaxes bladder sphincter / sympathetic constricts it e.g. parasympathetic causes vasoconstriction / sympathetic causes vasodilation e.g. parasympathetic causes glycogenesis / sympathetic causes glycogenolysis

Question			Answer	Mark	AO Element	Guidance
32	(a)		during pregnancy ✓ HIV can cross the placenta ✓ **OR** during birth ✓ mother's blood comes into contact with the baby's blood ✓	2	AO2.5	**IGNORE** explanation of mother and baby blood in contact for during pregnancy **DO NOT ALLOW** any reference to the sharing of hypodermic needles
32	(b)	(i)	natural passive (immunity) ✓	1	AO1.2	
32	(b)	(ii)	HIV cannot produce , viral DNA / cDNA ✓ (so) viral DNA cannot be integrated into host cell , DNA / genome ✓ (so) viral proteins cannot be produced ✓	2 max	AO2.5	**ALLOW** cannot reverse transcribe (viral) RNA into DNA **ALLOW** virus cannot replicate ✓
32	(c)	(i)	rapid / point of care (test) ✓ detects HIV antibodies / p24 / antigen ✓ **OR** blood sample / blood screening / blood test ✓ detects HIV antibodies / p24 / antigen ✓	2 max	AO1.2	**ALLOW** finger prick / mouth swab **ALLOW** AVP e.g. ELISA
32	(c)	(ii)	**FIRST CHECK THE ANSWER ON ANSWER LINE** **If answer = 0.14 award 2 marks** 50/365 = 0.1369863 **OR** 52/365 = 0.1424658✓ 0.14 ✓	2	AO2.6	**ALLOW** 1 mark if answer not to 2 sig fig

Question			Answer	Mark	AO Element	Guidance
32	(c)	(iii)	Line drawn on graph that shows decrease to 10 months **and** then rises again to 18 months ✓	1	AO3.1	
32	(c)	(iv)	*idea that* it is the mother's HIV antibodies (present in babies blood stream) ✓	1	AO3.1	**ALLOW** idea that antibodies come from , breast milk / placenta **DO NOT ALLOW** virus particles
32	(d)*		Please refer to the marking instructions on page 4 of this mark scheme for guidance on how to mark this question. **Level 3 (5–6 marks)** Detailed discussion about issues associated with the development **AND** use / implementation of vaccines. Includes statements about both biological **AND** ethical issues. *There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.* **Level 2 (3–4 marks)** Discussion about issues associated with development **OR** use / implementation of vaccines that includes statements about both biological **AND** ethical issues. **OR** Discussion about issues associated with development **AND** use / implementation of vaccines that includes statements about biological **OR** ethical issues.	6	AO1.2 AO2.5	**Indicative points: not exhaustive** ***Development of vaccine*** ***Biological issues:*** • changes in mutation rates of pathogens • changes to , antigens / viral protein coats • new antigens mean that antibodies already produced may no longer bind • new strains of pathogen • variation in surface antigens • examples e.g. new strains of influenza virus • *idea that* vaccine may only be effective in one geographical location due to variability in strains • sterile conditions required during vaccine development and production • avoiding contamination with live pathogens

Question			Answer	Mark	AO Element	Guidance
			There is a line of reasoning presented with some structure. The information presented is relevant and supported by some evidence. **Level 1 (1–2 marks)** Limited discussion that includes a statement about any issue associated with development **OR** use / implementation of vaccines. **EITHER** biological issues **OR** ethical issues *There is an attempt at a logical structure with a line of reasoning. The information is in the most part relevant.* **0 marks** *No response or no response worthy of credit.*			***Development of vaccine*** ***Ethical issues:*** • animal testing • high costs • time-consuming ***Use / implementation of vaccine*** ***Biological issues:*** • use of live / attenuated pathogens • difficulties with storage and transport • need for refrigeration difficult for some countries • poor diets impact immune systems so may not be effective for some people ***Use / implementation of vaccine*** ***Ethical issues:*** • unknown side-effects • parental consent for childhood vaccines • 'right to refuse' • data protection

<table>
<tr><th colspan="3">Question</th><th>Answer</th><th>Mark</th><th>AO Element</th><th>Guidance</th></tr>
<tr><td>33</td><td>(a)</td><td>(i)</td><td>fan (at set distance) with ability to change,
(air) speed / wind speed / wind intensity
OR
fan at set speed (with a metre ruler to move)
different distance from the plant ✓

ruler (alongside capillary tubing) to
measure distance moved by meniscus / air bubble ✓</td><td>2</td><td>AO3.4</td><td>ALLOW graduated / calibrated , capillary tube to measure the distance moved by meniscus</td></tr>
<tr><td>33</td><td>(a)</td><td>(ii)</td><td>table drawn with independent variable in first column ✓

appropriate headings i.e. distance from fan and
distance moved by meniscus / air bubble ✓

correct units used i.e. cm and mm ✓

mean correctly calculated to 1 d.p. ✓</td><td>4</td><td>AO3.1</td><td>Table example below
<table><tr><td rowspan="2">Distance from fan (cm)</td><td colspan="4">Distance moved from meniscus (mm)</td></tr><tr><td>Trial 1</td><td>Trial 2</td><td>Trial 3</td><td>Mean</td></tr><tr><td>20</td><td>15</td><td>16</td><td>14</td><td>15.0</td></tr><tr><td>40</td><td>13</td><td>14</td><td>12</td><td>13.0</td></tr><tr><td>60</td><td>10</td><td>9</td><td>9</td><td>9.3</td></tr><tr><td>80</td><td>8</td><td>7</td><td>7</td><td>7.3</td></tr><tr><td>100</td><td>5</td><td>6</td><td>4</td><td>5.0</td></tr></table></td></tr>
<tr><td>33</td><td>(a)</td><td>(iii)</td><td>FIRST CHECK THE ANSWER ON ANSWER LINE

If answer = 23.57 / 23.6 (mm hr^{-1}) award 2 marks

$(0.5^2 \times \pi) \times 15.0$ ✓
11.780972545 x 2 = 23.57 ✓</td><td>2</td><td>AO2.8</td><td></td></tr>
</table>

Question			Answer	Mark	AO Element	Guidance
33	**(b)**	**(i)**	dicotyledonous has vascular tissue / xylem is , central / in the middle / in core ✓ dicotyledonous as entire vascular tissue (shown in Fig. 33.3) surrounded by endodermis ✓ dicotyledonous as xylem forms , X formation / star-shape (shown in Fig. 33.3) ✓	**2 max**	AO3.1	No mark for dicotyledonous alone. Dicotyledonous must be mentioned once. **ALLOW ORA** for monocot features
33	**(b)**	**(ii)**	*similarities* - ***max 3*** have cell walls ✓ have , plasma / cell surface , membrane ✓ have cytoplasm ✓ have ribosomes ✓ *differences- for root hair cell* - ***max 3*** is eukaryotic ✓ has cell wall made of cellulose ✓ has (named) membrane-bound organelles ✓ does not have plasmid ✓ does not have flagellum ✓ has 80s ribosomes ✓ has histones ✓ has DNA inside a nucleus ✓	**4 max**	AO2.1	Mark first 4 similarities / differences **ALLOW** ORA for cell from developing root nodule e.g. is prokaryotic e.g. cell wall made of peptidoglycan / murein e.g. does not have a nucleus e.g. has plasmid e.g. has flagellum e.g. has 70s ribosomes e.g. does not have histones e.g. has (naked) DNA in the cytoplasm e.g. has a capsule **IGNORE** chloroplasts

Question			Answer	Mark	AO Element	Guidance
33	**(c)**		contain nitrogen-fixing bacteria ✓ gain nitrogen (directly) for, protein synthesis / making protein / amino acids ✓ mutualistic / symbiotic relationship (with bacteria) ✓	**2 max**	AO1.1	**ALLOW** contain Rhizobium **ALLOW** do not have to rely on gaining nitrates from the soil

Question			Answer	Mark	AO Element	Guidance
34	(a)	(i)	**E** = Z line ✓ **F** = A band ✓	**2**	AO2.3	
34	(a)	(ii)	**FIRST CHECK THE ANSWER ON ANSWER LINE** **If answer = 1.2 or 1.3 (μm) award 2 marks** image diameter in mm ÷ 10000 ✓ converted to μm = value x 1000 ✓	**2**	AO2.4	
34	(a)	(iii)	myofibrils consist of (named) proteins ✓ (limited RNA) so , less / no , translation / protein synthesis ✓ less / no , replacement of , old / damaged / worn , muscle fibres ✓ (after space flight) diameter / width / size of myofibrils decreases ✓	**3 max**	AO3.2	**ALLOW** less / no , transcription of DNA
34	(a)	(iv)	number / size , of fat droplets increase ✓ due to muscle , degradation / atrophy / AW ✓ *idea that* lipids produced instead of protein / AW ✓ *idea that* the reduction in the width of the myofibrils means fat droplets can increase in size ✓	**2 max**	AO3.2	

Question			Answer	Mark	AO Element	Guidance
34	**(b)***		Please refer to the marking instructions on page 4 of this mark scheme for guidance on how to mark this question. **Level 3 (5–6 marks)** Detailed evaluation that compares TEM with light **and** with SEM. Includes supporting **AND** non-supporting statements. *There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.* **Level 2 (3–4 marks)** Evaluation that compares TEM with light microscope **and** with SEM. Includes **EITHER** supporting **OR** non-supporting statements. **OR** Evaluation that compares TEM with light microscope **OR** with SEM. Includes both supporting **AND** non-supporting statements. *There is a line of reasoning presented with some structure. The information presented is relevant and supported by some evidence.* **Level 1 (1–2 marks)** Limited evaluation that compares TEM with light microscope **OR** with SEM. Includes **EITHER** supporting **OR** non-supporting statements. *There is an attempt at a logical structure with a line of reasoning. The information is in the most part relevant.*	**6**	AO2.1	**Indicative points – not exhaustive:** ***Reasons why statement is supported and TEM would be better than light microscope:*** • higher magnification • higher resolution • can identify organelles ***Reasons why statement is supported and TEM would be better than SEM:*** • higher resolution • 2D images produced with TEM are easy to interpret • inner structures can be seen more clearly ***Reasons why statement is not supported and TEM would not be better than light microscope:*** • complex staining procedure • artefacts may occur • high costs • need thin samples

Question			Answer	Mark	AO Element	Guidance
			0 marks *No response or no response worthy of credit.*			***Reasons why statement is not supported and TEM would not be better than SEM:*** • TEM does not provide detail of (muscle) surface or composition • TEM cannot produce 3D images / SEM produces 3D images • need thin samples

Question			Answer	Mark	AO Element	Guidance
35	**(a)**	**(i)**	arteriole ✓ fenestrations ✓ basement membrane ✓ podocytes ✓	**4**	AO1.2	
35	**(a)**	**(ii)**	juxtamedullary **AND** loop of Henle , is longer / extends further into medulla ✓	**1**	AO2.5	
35	**(a)**	**(iii)**	**FIRST CHECK THE ANSWER ON ANSWER LINE** **If answer = 270 000 award 1 mark** 15% x (900 000 x 2) ✓	**1**	AO2.8	
35	**(b)**	**(i)**	*conclusion* - ***1 max*** sexual function (reported as being) worse in HD patients than in PD patients / AW **OR** sleep disturbance was (reported as being) similar in both HD and PD patients / AW **OR** ability to work was most affected / sleep disturbance was least affected, in both HD and PD patients ✓ *limitations* - ***2 max*** subjective data used ✓ no information on whether 1 or 10 is high ✓ patients were only questioned , every 6 months ✓ no information about sample size/age/gender of participants ✓ no information about whether all participants	**3 max**	AO3.2	**ALLOW** sexual function declines in HD / sexual function improves in PD. **ALLOW** 3 times / for 18 months

Question			Answer	Mark	AO Element	Guidance
			completed every questionnaire / AW ✓			
35	**(b)**	**(ii)**	measures the spread of data around the mean ✓ can use in statistical , test / analysis ✓ can detect outliers ✓ assess repeatability of data ✓	**2 max**	AO3.2	**ALLOW** how close they are to the mean **ALLOW** e.g. see if error bars overlap **DO NOT ALLOW** less affected by outliers
35	**(c)**		*advantage* remove the need for dialysis **OR** improved quality of life / live independently **OR** extends life span ✓ *disadvantage* needs suitable donor / risk of rejecting the organ **OR** need for immunosuppressants **OR** invasive procedure / needs to be replaced ✓	**2 max**	AO1.2	**ALLOW** reduced disruption to life

Question			Answer	Mark	AO Element	Guidance
36	**(a)**	**(i)**	**Any two required** mood changes / increased anxiety / obsessive behaviour / disturbed sleep / confusion / weight loss ✓	**1**	AO2.1	**ALLOW** any appropriate symptoms for any stage of AD e.g. dysphagia / incontinence / decrease decision making / difficulty problem solving
36	**(a)**	**(ii)**	presence of (neurofibrillary) tangles ✓ (tau) protein deposits ✓ leads to , damaged / loss of , neurones ✓	**2 max**	AO2.1	
36	**(b)**	**(i)**	epigenetics ✓ no change to nucleotide / base / DNA, sequence / order ✓ gene structure , remains intact / doesn't change ✓ reversible ✓	**3 max**	AO1.2	
36	**(b)**	**(ii)**	(DNA methylation) switches genes off / decreases gene expression / prevents transcription ✓	**1**	AO1.2	

36	**(c)**		<table><tr><th>**Statement**</th><th>**True (T)** or **False (F)**</th></tr><tr><td>Electrical impulses sent between neurons in the brain can be detected using EEG scans.</td><td>True / T ✓</td></tr><tr><td>MRI scans do not use X-rays so are safer to use during pregnancy.</td><td>True / T ✓</td></tr><tr><td>PET scans use X-rays to construct images of internal structures.</td><td>False / F ✓</td></tr></table>	**3**	AO1.2	

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