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CAMBRIDGE
International Education

Cambridge International AS & A Level

BIOLOGY **9700/22**

Paper 2 AS Level Structured Questions **May/June 2026**

MARK SCHEME

Maximum Mark: 60

Published

This mark scheme contains the instructions and marking guidance that our examiners used to mark candidate responses for this component.

Before they start marking, examiners complete a standardisation process. They review a range of candidate responses and discuss the mark scheme in detail to agree which answers can and cannot be accepted. Examiners award marks where it is clear that candidate responses have met the requirements of the mark scheme. These requirements may vary between different components or different versions of the same component, depending on the exact requirements of the question and the candidate responses seen during the standardisation process.

Sometimes, our mark schemes may allow marks to be awarded to responses which contain elements that are factually incorrect or for content not covered by the syllabus. We do this in response to the demands of a specific question to support candidates and make sure that our assessments are fair. However, these allowances should not be used as a guide for teaching and learning.

We cannot discuss the mark scheme with schools, and we recommend that schools read the mark scheme together with the assessment material and the Principal Examiner Report for Teachers.

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General marking principles

All examiners must apply these marking principles when marking candidate responses.

1	Examiners must award marks for each response in line with: • the specific **content** defined in the mark scheme • the specific **skills** defined in the mark scheme or in the level descriptions • the **standard of response** required as exemplified by the standardisation scripts.
2	Examiners must award **whole marks** (not half marks, or other fractions).
3	Examiners must award marks **positively**. This means that: • marks are not deducted for errors or omissions • marks are awarded for correct/valid answers as defined in the mark scheme and also for **other valid answers** which go beyond the scope of the syllabus and mark scheme referring to your team leader as appropriate • the quality of spelling, punctuation and grammar are judged **only** when the mark scheme indicates that these features are **specifically assessed** in the question. However, the meaning of all responses must be unambiguous.
4	Examiners must **consistently** apply the requirements of the mark scheme and any rules for what to do when candidates have not followed instructions correctly.
5	Examiners must use the **full range of marks** defined in the mark scheme, unless limited by the quality of the candidate responses seen.
6	Examiners must award marks according to the mark scheme and **must not** award marks with grade thresholds or grade descriptions in mind.

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Science-Specific Marking Principles

1	Examiners should consider the context and scientific use of any keywords when awarding marks. Although keywords may be present, marks should not be awarded if the keywords are used incorrectly.
2	The examiner should not choose between contradictory statements given in the same question part, and credit should not be awarded for any correct statement that is contradicted within the same question part. Wrong science that is irrelevant to the question should be ignored.
3	Although spellings do not have to be correct, spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. ethane / ethene, glucagon / glycogen, refraction / reflection).
4	The error carried forward (ecf) principle should be applied, where appropriate. If an incorrect answer is subsequently used in a scientifically correct way, the candidate should be awarded these subsequent marking points. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.
5	‘List rule’ guidance For questions that require ***n*** responses (e.g. State **two** reasons …): • The response should be read as continuous prose, even when numbered answer spaces are provided. • Any response marked *ignore* in the mark scheme should not count towards ***n***. • Incorrect responses should not be awarded credit but will still count towards ***n***. • Read the entire response to check for any responses that contradict those that would otherwise be credited. Credit should **not** be awarded for any responses that are contradicted within the rest of the response. Where two responses contradict one another, this should be treated as a single incorrect response. • Non-contradictory responses after the first ***n*** responses may be ignored even if they include incorrect science.

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6 Calculation specific guidance

Correct answers to calculations should be given full credit even if there is no working or incorrect working, **unless** the question states 'show your working'.

For questions in which the number of significant figures required is not stated, credit should be awarded for correct answers when rounded by the examiner to the number of significant figures given in the mark scheme. This may not apply to measured values.

For answers given in standard form (e.g. $a \times 10^n$) in which the convention of restricting the value of the coefficient (a) to a value between 1 and 10 is not followed, credit may still be awarded if the answer can be converted to the answer given in the mark scheme.

Unless a separate mark is given for a unit, a missing or incorrect unit will normally mean that the final calculation mark is not awarded. Exceptions to this general principle will be noted in the mark scheme.

7 Guidance for chemical equations

Multiples / fractions of coefficients used in chemical equations are acceptable unless stated otherwise in the mark scheme.

State symbols given in an equation should be ignored unless asked for in the question or stated otherwise in the mark scheme.

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Annotations guidance for centres

Examiners use a system of annotations as a shorthand for communicating their marking decisions to one another. Examiners are trained during the standardisation process on how and when to use annotations. The purpose of annotations is to inform the standardisation and monitoring processes and guide the supervising examiners when they are checking the work of examiners within their team. The meaning of annotations and how they are used is specific to each component and is understood by all examiners who mark the component.

We publish annotations in our mark schemes to help centres understand the annotations they may see on copies of scripts. Note that there may not be a direct correlation between the number of annotations on a script and the mark awarded. Similarly, the use of an annotation may not be an indication of the quality of the response.

The annotations listed below were available to examiners marking this component in this series.

Annotations

Annotation	Meaning
	correct point or mark awarded
	correct awarding one mark from marking point or marking group 1. similar numbered ticks are used for marking point or marking groups 2, 3, 4 etc.
	incorrect point or mark not awarded
	working towards marking point
	information missing or insufficient for credit
	used to highlight part of an extended response
	used to highlight part of an extended response
	allow or accept
	benefit of the doubt given

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Annotation	Meaning
CON	contradiction in response, mark not awarded
ECF	error carried forward applied
I	incorrect or insufficient point ignored while marking the rest of the response
IRRL	irrelevant material that does not answer the question
O	or reverse argument
PAG	point already given
R	incorrect point or mark not awarded
SEEN	point has been noted, but no credit has been given or blank page seen

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Mark scheme abbreviations

;	separates marking points
/	alternative answers for the same point
A	accept (for answers correctly cued by the question, or by extra guidance)
R	reject
I	ignore
( )	the word / phrase in brackets is not required, but sets the context
AW	alternative wording (where responses vary more than usual)
underline	actual word given must be used by candidate (grammatical variants accepted)
max	indicates the maximum number of marks that can be given
ora	or reverse argument
mp	marking point (with relevant number)
ecf	error carried forward
AVP	alternative valid point
bod	allow benefit of doubt

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Question	Answer	Marks
1(a)	*any **one** from:* mitochondrion **; bod** mitochondria chloroplast **;** nucleus **; R** newcleus / nuculus / nucelus	**1**
1(b)(i)	structure **A** = capsid **; A** protein coat **I** other correct detail e.g. (*capsid) made of, protein / subunits / capsomeres* **or** *(capsid / outer coat) with capsomeres / containing capsomeres* **R** capsid with, envelope / wall / outer membrane structure **B** = (murein / peptidoglycan / bacterial) cell wall **; I** outer layer **R** cellulose / chitin, cell wall **bod** murein / peptidoglycan, wall	**2**
1(b)(ii)	152 – 186 (nm) to a whole number **;;** *one calculated value required* *(**X**–**Y** 63–65 mm and T-phage image length 11–13 mm)* *allow 1 mark if correct but not to nearest whole number* **or** *allow 1 mark if answer is a whole number between 136–151 or 187–203 and **X**–**Y** measurement recorded as 62 or 66 mm and/or T-phage length 10 or 14 mm*	**2**

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Question	Answer	Marks
1(c)	*look for **ora** if describing why T-phage does not bind to other species* **1** *ref. to* specific (to *E. coli*) / specificity (of T-phage to *E. coli*) **;** **A** *ref. to* complementarity / complementary (shape for binding) **2** detail of T-phage <u>and</u> *E. coli* interaction **;** **R** if describing enzyme-substrate <u>or</u> antibody-antigen binding *T-phage* (ends of) tail fibres / (T-) phage / receptors (on phage) **I** antigen **R** membrane **A** 'it' *if correct context* (*T-phage is in the Q*) *named location on E. coli (to which the phage attaches)* receptor (in / on, cell wall / cell surface membrane) **A** cell receptor but **R** receptor cells cell (surface) membrane outer membrane / lipopolysaccharide / porin (of cell wall) membrane protein / glycoprotein **bod** antigen *context is antigenic molecule on the surface* **I** cell wall / murein / peptidoglycan	**2**
1(d)(i)	malaria <u>and</u> not caused by, a bacterium / bacteria / prokaryote **or** caused by a, protoctist / eukaryote **;** **R** *if 'virus' incorrectly appears within answer* **I** details about malaria e.g. antigenic concealment / vector **bod** *close or phonetic spelling for protoctist and eukaryote* *allow non-syllabus names e.g.protozoa / protista / apicomplexa / sporozoa*	**1**

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Question	Answer	Marks
1(d)(ii)	*accept AW and* ***ora*** *for these mps* *any* ***three*** *from:* **1** will not harm / AW, human / body, cells **;** **A** tissues / organs, for cells **2** less / no, chance of, allergic reactions / immune response / side effects / toxic effects / AW (from treatment) **;** **3** specific to treat a particular disease / kills only the pathogen intended **;** **I** specific to bacteria *context is specific for / to kill only, the bacteria causing the disease* **4** does not, affect / kill, beneficial / AW, bacteria **;** **A** gut microbiome not affected **5** can, replicate / multiply, within person being treated (as they replicate in cells of bacterial pathogen) **;** **I** reproduces **6** (may) need only one dose / short(er) duration of treatment **;** **A** *idea of* no need for a, full / long, course (compared with antibiotics) **7** (may result in) quicker cure / faster recovery / faster response (*than, antibiotics / passive immunisation / antibody treatmen*t) **;** **8** can use to treat antibiotic-resistant bacteria / decreases impact of antibiotic resistance / decreases chance of antibiotic resistance occurring / AW **;** **9** detail **;** e.g. fewer antibiotics prescribed *(not having a long course is mp6)* less reliance on antibiotics eases pressure on, finding / developing, new antibiotics **10** less / no, risk of becoming resistant to attack by T-phage **;** **11** AVP **;** e.g. less research and development required	**3**

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Question	Answer	Marks
2(a)(i)	cartilage **;** **bod** hyaline tissue	**1**

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Question	Answer	Marks
2(a)(ii)	*check **2(a)(i)** if answer seems to be about, elastic tissue / smooth muscle / ciliated epithelium* **I** respiration *for breathing* *any **three** from:* C-shaped / incomplete rings / AW, in <u>trachea</u> **A** windpipe **or** irregular / plates , in, <u>bronchus / bronchi</u> **;** **bod** blocks other structural feature **;** e.g. surrounded by, perichondrium / layer of (dense) connective tissue two or three chondrocytes in, cavity / protective space / lacuna flexible **;** *context is during, ventilation / breathing / changes in diameter of airway / bending of airway (but does not need stating)* supports / provides strength for, airway / trachea / bronchus **;** *context is maintaining tubular structure* **I** for structure keeps airways open / prevents airways collapsing **;** (*during, breathing / ventilation / changes in pressure*) *alternatives if incorrect gas exchange tissue stated in **2(a)(i):*** *allow 1 mark max **ecf** for feature / role (all information to be correct)* e.g. elastic, tissue / fibres e.g. stretch / expand, and recoil **R** contract / relax smooth muscle tissue e.g. contracts and relaxes **R** stretch / recoil ciliated epithelium e.g. has ciliated epithelial cells and goblet cells / produces mucus and moves this by cilia out of airway **R** has mucous glands *allow 1 mark max if two different gas exchange tissues are described*	**3**

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Question	Answer	Marks
2(b)	*allow 'they' for 'telomeres' (as in the question text)* *ignore values for the number of bases 'lost' from telomere each replication as this varies* *any **two** from:* ends of, telomeres / DNA / chromosomes, shorten / are lost / AW **;** **A** telomeres shorten **I** telomeres lost *context is each, DNA replication / (mitotic) cell cycle* telomeres prevent the loss of, genes / genetic information **;** **ora** presence of telomeres maintains, genes / genetic information **I** genetic material **bod** coding DNA *ref. to* continued / AW, mitosis / cell division / cell cycles, (of fibroblasts, needed for collagen production) **;** **bod** cell replication AVP **;** e.g. if telomeres lost, ends of chromosome may stick together (and affect mitosis) AW	**2**
2(c)	centrioles **; A** centrosomes **R** if microtubules also stated	**1**

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Question	Answer	Marks
2(d)	*any **two** from:* single DNA molecule **;** **A** *idea that the two joined sister chromatids are now separate entities (daughter chromosomes each with a DNA molecule)* **R** chromatids, separated from their centromere **I** monovalent chromosome (tightly complexed with) histones **or** histone / basic, proteins **;** (one) centromere **; I** *ref. to* kinetochore / spindle microtubules correct *ref. to* state of condensation **;** e.g. (early telophase) are, condensed / coiled / supercoiled (during telophase, begin to), decondense / uncoil / become diffuse **R** is decondensed, unless there is further explanation e.g. *'…at the end of telophase' / 'becomes uncoiled and is decondensed'* *timing within telophase not needed but if stated reject a **CON** e.g. 'decondense at the start of telophase'* AVP **;** e.g. detached / detaching, from, spindle / spindle fibre microtubules / kinetochore, detaching / not attached / AW	**2**
2(e)(i)	endothelial (cell) **;** **R** endothelium **bod** endothelium <u>cell</u> **R** squamous epithelial (cell)	**1**
2(e)(ii)	becomes thicker / more dense (ECM) / thicker layer **;** **I** more collagen / collagen acts as a barrier **I** longer **I** increased concentration of components (*in Q text*) increased diffusion distance (for oxygen) **;** decreased <u>rate</u> of diffusion (of oxygen) / less oxygen enters <u>per unit time</u> **;**	**2**

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Question	Answer	Marks
2(f)(i)	peptide (bond) **;** **R** polypeptide bond **bod** amide (bond)	**1**
2(f)(ii)	*allow H bonds for hydrogen bonds* *any **three** from:* small amino acids / amino acids with small R-groups **;** **A** glycine smallest amino acid **A** glycine / alanine, is a small amino acid glycine R-group H <u>and</u> alanine R-group CH_3 **;** allows formation of triple helix **;** **A** *ref. to* triple helical structure / three polypeptides wound into a helix / three helical polypeptide chains **R** *ref. to* triple helix forms a fibre **R** *ref. to* alpha helix allows tight, packing / coiling, of polypeptides AW **or** polypeptides held close together / AW / gly and ala on inside of coils **;** *ref. to* hydrogen / H, bonds (involving, glycine / alanine) **;** **R** strong H bonds **R** if covalent / disulfide / covalent cross-link bonds, stated *context is between polypeptides in the collagen molecule* *allow **ecf** if incorrect term used in mp3 or mp4* room / space, for, amine / amide / amino, groups to form hydrogen bonds **;**	**3**

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>3</td><td>

must attempt conclusions and explanation to gain max

allow salt for NaCl ***bod*** *ref. to, salinity / salinity stress (indicates NaCl)*
allow either mp2 ***or*** *mp4, and allow manipulated data for these*

1 *(for, root / shoot, overall main trend is)* increasing NaCl concentration, decreases dry mass / growth is more inhibited **;**

2 comparison data, any two concentrations, root <u>or</u> shoot dry mass **;**

control

NaCl	root	shoot
0 mmoldm^{-3}	0.53 g	0.24 g
110 mmoldm^{-3}	0.14 g	0.09 g
220 mmoldm^{-3}	0.04 g	0.04 g
330 mmoldm^{-3}	0.02 g	0.02 g

***I** NaCl conc of zero
MeJa (*0=0.19g and 0.12g)

NaCl	root	shoot
110 mmol dm^{-3}	0.21 g	0.12 g
220 mmol dm^{-3}	0.13 g	0.06 g
330 mmol dm^{-3}	0.06 g	0.04 g

3 *idea that* MeJA presence produces, better growth / higher (dry) mass , when NaCl present ;

4 comparison data, one concentration, control and MeJA, root <u>or</u> shoot dry mass **;**

root shoot

NaCl	control	MeJA
110 mmol dm^{-3}	0.14 g	0.21 g
220 mmol dm^{-3}	0.04 g	0.13 g
330 mmol dm^{-3}	0.02 g	0.06 g

NaCl	control	MeJA
110 mmol dm^{-3}	0.09 g	0.12 g
220 mmol dm^{-3}	0.04 g	0.06 g
330 mmol dm^{-3}	0.02 g	0.04 g

</td><td>**4**</td></tr>
</table>

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Question	Answer	Marks
3	**5** MeJA presence, inhibits growth / decreases dry mass / results in less growth, with no NaCl / at 0 mmol dm^{-3} **; ora** **A** MeJA presence with, no NaCl / at 0 mmol dm^{-3}, in root is 0.19 g and control is 0.53 g / in shoot is 0.12 g and control is 0.24 g *max 3 out of 4 for effect of MeJA* **6** MeJA, transported / AW, to roots, in phloem sap / by mass flow / in phloem **;** **7** target cells / receptors, (in roots) for binding of MeJA **;** **8** binding of MeJA, stimulates (protective) response in cells **;** *context is overall response* **I** *transduction / second messengers / enzyme cascade etc.* **9** AVP **;** suggestion of cell-signalling response that occurs to give tolerance e.g. increased, water uptake / osmosis (into, roots / cells) efflux, sodium ions / chloride ions partitioning ions within vacuoles of root cells less water leaves cells AW enzymes produced to help growth *if mp9 gained and MeJA binding stated, then also award mp8*	

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Question	Answer	Marks
4(a)	plasma cell **;** **bod** B-lymphocyte / B-cell / B-plasma cells	**1**
4(b)	**T** → **S** → **Q** → **R** → **P** **;;** *allow **one** mark for correct order T, S, Q, R and only P out of sequence:* • *TPSQR* • *TSPQR* • *TSQPR*	**2**
4(c)(i)	*any **two** from:* (so) unable to, synthesise / AW, nucleic acid / DNA / RNA **I** genetic material **or** cannot carry out, DNA replication / S phase / synthesis phase **;** **A** semi-conservative replication *plus any **one** from:* unable to produce, sister / identical, chromatid(s) **;** cannot pass checkpoint to progress to mitosis **;** complementary base pairing cannot occur (in DNA replication) **;** **A** purine-pyrimidine pairing cannot occur **A** *idea of* no complementary bases (for replication) *allow ref. to complementary nucleotides*	**2**

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Question	Answer	Marks
4(c)(ii)	*if mp4 causes mp1, or comes before mp1 in chronological sequence, allow <u>only</u> mp4 *any **three** from:* **1** *changed (DNA), base / nucleotide, sequence **;** **2** base substitution leading to changed amino acid **or** deletion / insertion, causing, frameshift / described **;** **R** if *ref. to* is insertion / deletion / frameshift, of amino acids / to amino acid chain **3** premature / AW, STOP codon causing shortened, polypeptide (chain) / protein **;** *context of changed codon from substitution or frameshift* **4** *changes / affects / disrupts / AW, primary structure / sequence of amino acids **;** **5** change to <u>active site</u>, qualified **; I** does not function e.g. no longer complementary to substrate altered, shape / (tertiary) structure, (compared to functional enzyme) as, tertiary structure of enzyme has changed *ref. to* catalytic site changed no enzyme-substrate complexes form	**3**
4(d)(i)	human immunodeficiency virus **;** *must be spelled correctly* **A** human, immuno-deficiency / immuno deficiency, virus	**1**
4(d)(ii)	*any **two** from:* antibody molecules, are broken down / become degraded / AW **;** **A** not long-lived / short-lived *allow context of destruction by phagocytes or removal from circulation* **I** 'flushed out' unless qualified passive, treatment / immunity / prevention **; A** not active immunity <u>immune response</u> not triggered **; I** immune system does not respond (B / T), memory cells not produced **;** high risk individual may be, continually / regularly, exposed to HIV **;** AW	**2**

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Question	Answer	Marks
4(d)(iii)	*max 2 if response is clearly about a person who is already infected with HIV* *allow (envelope) glycoprotein for gp120* *any **three** from:* **1** monoclonal antibodies are specific **;** **A** *ref. to* complementary shapes (of, antigen/epitope, and antibody) **2** more than one (HIV), antigen / glycoprotein, is involved in, attaching / binding / entering, host cells **;** **3** better protection / more efficient / increases chances / AW, against the different strains / variants / types / AW **;** **A** better able to cope with / AW, antibody, resistance / resistant strains but **R** *ref. to* antibiotic resistance **I** ref. to 'immune' **4** different strains (of HIV) may have (slightly) different shapes of, gp120 / envelope glycoprotein **A** *idea that* HIV mutates so, gp120 may vary / different antigens present / different surface receptors present **or** mixture of (monoclonal) antibodies to allow for each variant of gp120 **;** **bod** different strains (of HIV) may have different antigens **5** AVP **;** e.g. VRC01, (only) binds to / acts against, one site on gp 120 **ora** different monoclonal antibodies will bind at different sites on gp120 mixture of antibodies, (may) bind to / act against, more sites on gp 120 antibodies can attach to a number of sites on HIV to increase body (immune system) response	**3**

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>5(a)</td><td>
<table>
<tr><th>description</th><th>letter</th></tr>
<tr><td>the chamber of the heart that receives blood from the vena cava</td><td>H ;</td></tr>
<tr><td>the chamber of the heart that pumps blood directly into the pulmonary artery</td><td>G ;</td></tr>
<tr><td>an artery with a large quantity of elastic fibres and proportionately very little smooth muscle in the tunica media
if more than one letter given – all must be correct</td><td>A / C / K ;</td></tr>
<tr><td>a vein transporting oxygenated blood</td><td>B ;</td></tr>
</table>
</td><td>4</td></tr>
<tr><td>5(b)(i)</td><td>
any two from:
allows, blood / water, to
resist / AW, changes in temperature ;
A slow to change when temperatures change
A prevents short-term temperature fluctuations / AW
A a lot of energy required to cause a (small) temperature change

helps, to maintain a, constant / stable, body temperature
I optimum temperature
A ref. to constant / stable, blood temperature for homeostasis
or
helps to distribute heat evenly around the body / in thermoregulation ; AW

maintain a, steady / constant, external environment for, tissues / cells ;

(blood) temperature affects / constant (blood) temperature maintains,
solubility of solutes in blood /
efficient enzyme functioning AW (in blood / cells) /
viscosity / AW, of blood
temperature of tissue fluid
protein, function / structure / AW ;
</td><td>2</td></tr>
</table>

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Question	Answer	Marks
5(b)(ii)	*any **three** from:* **1** solvent for, assimilates / photosynthates / organic substances / mineral ions (present in phloem sap) **;** **A** named substances / ions **2** *idea that* water enters phloem (sieve tube) to counteract lower water potential caused by sucrose **;** **R** lower water potential gradient **3** increases, water potential / volume (at source) **;** *context must be the source* **4** increases / high, hydrostatic pressure (at source) / hydrostatic pressure gradient (between source and sink) forms **; bod** hydrostatic pressure difference created / AW **5** water, moves out / exits, (by osmosis) at sink (following solutes), so lowers hydrostatic pressure **;** *ref. to hydrostatic needed only once* **6** *ref. to* cohesive nature of water **or** cohesion / hydrogen bonding, between water molecules, qualified with a correct context **;** e.g. for bulk flow for movement, of phloem sap / in phloem for translocation to maintain, continuous, column / stream (of sap)	**3**

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Question	Answer	Marks
6(a)	pH = 7.5 **;** temperature = 55 °C **; A** 51–57 °C	**2**
6(b)	*any **three** from:* *at, optimum / pH 7.5 allow **ecf** from **Q6(a)*** allows, maximum / 100%, activity of enzyme / active site functions at maximum rate **;** AW **A** best fit of substrate into active site / AW *either side of optimum* hydrogen / ionic, bonds, affected / disrupted / broken **;** **R** if, peptide / disulfide bond also stated may affect charges on, R-groups / side chains **;** may affect ability to, transfer electrons (in catalytic site) **;** may affect <u>shape</u> of active site / less ability to form enzyme-substrate complexes / *idea of* active site less complementary to substrate **;** **I** ESC *answers may be in terms of denatured e.g. no enzyme-substrate complexes form* partial denaturation / some enzyme molecules denatured **/** starts to denature **; A** enzymes for enzyme molecules **A** *ref. to* denatured at, pH 11 / 2% activity *must be a standalone idea* *for this mp ignore responses such as* 'from pH 7.5 to pH 11 activity decreases because enzyme is denatured'	**3**

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Question	Answer	Marks
6(c)	*any **one** from:* **1** easier for test to take place at room temperature **; ora** **2** ALT may denature (at optimum temperature, for LDH / at 55°) **;** **3** substances reacting with ALT / substrates produced for LDH, may be affected **;** **4** reaction may proceed too quickly to obtain accurate results / AW **;** **5** bacterial LDH may be a different form **;** **6** AVP **;** e.g. suggestion that, reaction using ALT cannot occur / ALT may have different optimum temperature	**1**

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