

Unit Code: H020/01

Qual Name: AS Level Biology A

Qual Title: Breadth in biology

Question Set	Q. No	Total Marks	AO	Spec Ref.	Topic	Question Subject, If required	Additional Notes/Comments
1	1	1	2	1.1.1 (a), 3.1.3(c)	Planning / Transport in plants		Synoptic question. Practical skills question set in plant transport context.
1	2	1	2	1.1.3 (b), 2.1.4(d)(ii)	Analysis / Enzymes		Synoptic question. Practical skills question set in an enzymes context.
1	3	1	2	1.1.3b	Analysis		
2	1	1	1	2.1.3(a)	Nucleotides and nucleic acids		
2	2	1	1	2.1.3.(d)ii , 1.1.2(a)	Nucleotides and nucleic acids		Synoptic question with practical skills
2	3	1	2	2.1.2.(a)	Biological molecules		
2	4	1	1	2.1.2(g)	Biological molecules		
2	5	1	2	2.1.2(q), 2.1.4(c), 2.1.2(f), 1.1.3.(a)	Biological molecules / Enzymes		Synoptic question with practical skills
2	6	1	1	2.1.3(f)	Nucleotides and nucleic acids		
2	7	1	2	2.1.5(b), 2.1.2(j)	Biological membranes / Biological molecules		
2	8	1	1	2.1.4(e)	Enzymes		
2	9	1	1	2.1.3.(b)	Nucleotides and nucleic acids		
2	10	1	1	2.1.1(i)	Cell structure		
2	11	1	2	2.1.2(e)	Biological molecules		
2	12	1	2	2.1.5(d)(i)	Biological membranes		
2	13	1	2	2.1.4(d)(i)	Enzymes		
2	14	1	2	2.1.2(g)	Biological molecules		
2	15	1	2	2.1.1(k)	Cell structure		
2	16	1	2	2.1.5.(c)(ii) 1.1.3 (d)	Biological membranes		Synoptic question with practical skills

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2	17	1	1	2.1.5.(e)(i)(ii) 1.1.3 (d) (ii)	Biological membranes		Synoptic question with practical skills
2	18	1	1	2.1.2(c)	Biological molecules		
2	19	1	2	2.1.6(a)(b)	Cell division, cell diversity and cellular organisation		
2	20	1	1	2.1.5(d)i	Biological membranes		
2	21	1	1	2.1.5(b)	Biological membranes		
2	22	1	1	2.1.5 (d)(i) (e)(i)	Biological membranes		
2	23	1	1	2.1.3 (d)(i)	Nucleotides and nucleic acids		
2	24	1	1	2.1.2.(d)	Biological molecules		
2	25	1	2	2.1.2(k)	Biological molecules		
2	26	1	2	2.1.4(f)	Enzymes		
2	27	1	2	2.1.2(p), 2.1.4 (e)	Biological molecules / Enzymes		Synoptic question with biological molecules and enzymes
2	28	1	1	2.1.6(a)	Cell division, cell diversity and cellular organisation		
3	1	1	1	3.1.1(c)	Exchange surfaces		
3	2	1	1	3.1.3(a)	Transport in plants		
3	3	1	1	3.1.3(e)	Transport in plants		
3	4	1	1	3.1.2(d)	Transport in animals		
3	5	1	2	3.1.2(h), 1.1.3(a)	Transport in animals		Synoptic question with practical skills
3	6	1	1	3.1.2(c)	Transport in animals		
3	7	1	1	3.1.2(b)	Transport in animals		
3	8	1	1	3.1.3e / 4.2.2(g)	Transport in plants / Classification and evolution		Synoptic question with Classification and evolution
3	9	1	1	3.1.2(j)	Transport in animals		
3	10	1	1	3.1.3(f)	Transport in plants		
3	11	1	2	3.1.2(e)(i)	Transport in animals		
3	12	1	1	3.1.2(i)	Transport in animals		
3	13	1	1	3.1.3(e)	Transport in plants		
3	14	1	1	3.1.1 (d)	Exchange surfaces		
3	15	1	1	3.1.1 (f)(g)	Exchange surfaces		
4	1	1	2	4.2.1(e)	Biodiversity		
4	2	1	1	4.1.1(m), 4.2.1(g)	Communicable diseases, disease prevention and the immune system / biodiversity		Synoptic question

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4	3	1	2	4.1.1(k)	Communicable diseases, disease prevention and the immune system		
4	4	1	1	4.2.2(d)	Classification and evolution		
4	5	1	1	4.1.1(j)	Communicable diseases, disease prevention and the immune system		
4	6	1	1	4.1.1(j)(k)	Communicable diseases, disease prevention and the immune system		
4	7	1	1	4.1.1(f)(g)	Communicable diseases, disease prevention and the immune system		
4	8	1	1	4.2.1(h)	Biodiversity		
4	9	1	1	4.1.1(c)	Communicable diseases, disease prevention and the immune system		
4	10	1	2	4.1.1(a), 2.1.1(k)	Communicable diseases, disease prevention and the immune system / Cell structure		Synoptic question with Cell structure
4	11	1	2	4.2.2i, 4.1.1(a)	Classification and evolution / Communicable diseases, disease prevention and the immune system		Synoptic question with Communicable diseases, disease prevention and the immune system
4	12	1	1	4.2.1h	Biodiversity		
4	13	1	2	4.2.2(f)	Classification and evolution		
4	14	1	2	4.2.2a	Classification and evolution		
5	1(a)(i)	2	2	2.1.6 (d), 1.1.2(a)	Cell division, cell diversity and cellular organisation / Development of practical skills in biology - Implementing	This question is about mitosis and the use of microscopy skills	
5	1(a)(ii)	1	2	2.1.1(c), 1.1.2(a)	Cell structure / Development of practical skills in biology - Implementing	This question is about mitosis and the use of microscopy skills	
5	1(b)	2	2	2.1.1(b), 1.1.2(a), 1.1.2(b), 1.1.3(a), 1.1.3(b), 1.1.3(c)	Cell structure / Development of practical skills in biology - Implementing & analysis	This question is about mitosis and the use of microscopy skills	
6	1(a)	3	1	2.1.2(f), (g)	Biological molecules	This question is about biological molecules and the interrelationship between the organelles in a cell.	
6	1(b)	3	2	2.1.1(i)	Cell structure	This question is about biological molecules and the interrelationship between the organelles in a cell.	

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7	1a	2	2	2.1.5(b)	Biological membranes	This question is about the movement of substances across membranes with synoptic links to ATP and data analysis, interpretation and evaluation.	
7	1bi	2	2	2.1.5.(a)	Biological membranes	This question is about the movement of substances across membranes with synoptic links to ATP and data analysis, interpretation and evaluation.	
7	1bii	1	1	2.1.5.(a)	Biological membranes	This question is about the movement of substances across membranes with synoptic links to ATP and data analysis, interpretation and evaluation.	
7	1ci	1	1	2.1.5(a)	Biological membranes	This question is about the movement of substances across membranes with synoptic links to ATP and data analysis, interpretation and evaluation.	
7	1cii	2	1	2.1.3(e)	Nucleotides and nucleic acids	This question is about the movement of substances across membranes with synoptic links to ATP and data analysis, interpretation and evaluation.	
7	1di	3	2	2.1.5 (c) (ii), 1.1.3(a), 1.1.3(b), 1.1.3(c)	Biological membranes / Development of practical skills in biology - analysis	This question is about the movement of substances across membranes with synoptic links to ATP and data analysis, interpretation and evaluation.	
7	1dii	2	2	2.1.5 (c) (ii), 1.1.3(a), 1.1.3(b)	Biological membranes / Development of practical skills in biology - analysis	This question is about the movement of substances across membranes with synoptic links to ATP and data analysis, interpretation and evaluation.	
7	1e	3	2	2.1.5(c)(i), 1.1.4(a)	Biological membranes / Development of practical skills in biology - evaluation	This question is about the movement of substances across membranes with synoptic links to ATP and data analysis, interpretation and evaluation.	
8	1ai	1	1	4.2.2(c)ii	Classification and evolution.	This question is about classification systems	
8	1aaii	2	1	4.2.2(c)ii	Classification and evolution.	This question is about classification systems	
8	1aiiii	2	1	4.2.2(c)ii, 2.1.1(k)	Classification and evolution / Cell structure	This question is about classification systems	
8	1b	2	3	4.2.2(c)ii	Classification and evolution.	This question is about classification systems	
9	1ai	1	2	2.1.3(e)	Nucleotides and nucleic acids	This question is about semi-conservative replication in DNA	
9	1aii	4	1	2.1.3(e)	Nucleotides and nucleic acids	This question is about semi-conservative replication in DNA	

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9	1b	2	3	2.1.3(e), 1.1.3(a)	Nucleotides and nucleic acids / Development of practical skills in biology - analysis	This question is about semi-conservative replication in DNA	
10	1a	3	3	2.1.4(d)(i)(ii) , 1.1.1(a), 1.1.1(b)	Enzymes / Development of practical skills in biology - Planning	This question is about measuring the rate of an enzyme controlled reaction and the use of practical skills	
10	1bi	1	1	2.1.4(d)(i)(ii) , 1.1.3(a), 1.1.3(b)	Enzymes / Development of practical skills in biology - Analysis	This question is about measuring the rate of an enzyme controlled reaction and the use of practical skills	
10	1bii	2	3	2.1.4(d)(i)(ii), 1.1.4(c), 1.1.4(d)	Enzymes / Development of practical skills in biology - Evaluation	This question is about measuring the rate of an enzyme controlled reaction and the use of practical skills	
10	1c	3	2 & 3	2.1.4(d)(i)(ii) , 1.1.3(a)	Enzymes / Development of practical skills in biology - Analysis	This question is about measuring the rate of an enzyme controlled reaction and the use of practical skills	
11	1a	1	2	4.2.2(a)	Classification and evolution.	This is a synoptic question that touches on classification, biological molecules, gaseous exchange, rate of diffusion in model cells and use of practical skills.	
11	1b	2	1	2.1.2(a)	Biological molecules	This is a synoptic question that touches on classification, biological molecules, gaseous exchange, rate of diffusion in model cells and use of practical skills.	
11	1ci	2	2	3.1.1(a)	Exchange surfaces	This is a synoptic question that touches on classification, biological molecules, gaseous exchange, rate of diffusion in model cells and use of practical skills.	
11	1cii	2	1	3.1.1(b)	Exchange surfaces	This is a synoptic question that touches on classification, biological molecules, gaseous exchange, rate of diffusion in model cells and use of practical skills.	
11	1di	2	3	2.1.5(d)(ii) 1.1.1 (a) (b)	Biological membranes / Development of practical skills in biology - planning	This is a synoptic question that touches on classification, biological molecules, gaseous exchange, rate of diffusion in model cells and use of practical skills.	
11	1dii	2	2	2.1.5(d) 1.1.3 (b)	Biological membranes / Development of practical skills in biology - Analysis	This is a synoptic question that touches on classification, biological molecules, gaseous exchange, rate of diffusion in model cells and use of practical skills.	
11	1diii	3	1	3.1.2(a)	Transport in animals	This is a synoptic question that touches on classification, biological molecules, gaseous exchange, rate of diffusion in model cells and use of practical skills.	

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12	1a	1	1	2.1.2(h)	Biological molecules	This is a question about lipids.	
12	1b	1	2	2.1.2(h)	Biological molecules	This is a question about lipids.	
12	1c(i)	3	1	2.1.2.(j)	Biological molecules	This is a question about lipids.	
12	1c(ii)	2	2	2.1.2.(j)	Biological molecules	This is a question about lipids.	
12	1d	2	3	2.1.2(h)	Biological molecules	This is a question about lipids.	
13	1a	2	2	2.1.1(e) 1.1.3 (b)	Cell structure / Development of practical skills in biology - Analysis	This is a synoptic question is about stem structure, tissues and use of microscopy skills.	Image may no longer be to scale.
13	1(b)(i)	1	2	2.1.6(i)	Cell division, cell diversity and cellular organisation	This is a synoptic question is about stem structure, tissues and use of microscopy skills.	
13	1(b)(ii)	2	1	2.1.6(i)	Cell division, cell diversity and cellular organisation	This is a synoptic question is about stem structure, tissues and use of microscopy skills.	
13	1(c)	1	1	2.1.6(l)	Cell division, cell diversity and cellular organisation	This is a synoptic question is about stem structure, tissues and use of microscopy skills.	
14	1(a)(i)	1	1	2.1.3(a), 2.1.2.(d)	Nucleotides and nucleic acids	This question is about nucleotides	
14	1(a)(ii)	1	1	2.1.3(a)	Nucleotides and nucleic acids	This question is about nucleotides	
14	1(b)	4	1	2.1.3(c)	Nucleotides and nucleic acids	This question is about nucleotides	
15	1(a)	1	2	4.2.2(f)	Biodiversity	This is a question set in the context of variation testing practical skills.	
15	1(b)	3	3	1.1.1 (a) 1.2.2 (d)	Development of practical skills in biology - planning	This is a question set in the context of variation testing practical skills.	
15	1(c) (i)	2	2	4.2.2(f) 1.1.3 (b)	Classification and evolution / Development of practical skills in biology - analysis	This is a question set in the context of variation testing practical skills.	
15	1(c) (ii)	2	2	4.2.2(f) 1.1.3 (b)	Classification and evolution / Development of practical skills in biology - analysis	This is a question set in the context of variation testing practical skills.	
15	1(d)(i)	2	2	3.1.3(c)(i)	Transport in plants	This is a question set in the context of variation testing practical skills.	
15	1(d)(ii)	3	3	1.1.1(a) (b), 1.2.2(k)	Development of practical skills in biology - planning	This is a question set in the context of variation testing practical skills.	
15	1(e)	2	3	4.2.2(f) 1.1.3 (b)	Classification and evolution / Development of practical skills in biology - analysis	This is a question set in the context of variation testing practical skills.	
16	1(a)	3	3	1.1.2 (c)	Development of practical skills in biology - implementing	This question tests practical skills in the context of an osmosis experiment	
16	1(b) (i)	2	2 & 3	1.1.3 (a) 2.1.5(c) (i)(ii)e(i)	Development of practical skills in biology - analysis / Biological membranes	This question tests practical skills in the context of an osmosis experiment	
16	1 (b) (ii)	2	2 & 3	1.1.3 (a) 2.1.5 (c) (i) (ii) e (i)	Development of practical skills in biology - analysis / Biological membranes	This question tests practical skills in the context of an osmosis experiment	

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16	1 (c)	1	3	1.1.3 (a)	Development of practical skills in biology - evaluation	This question tests practical skills in the context of an osmosis experiment	
17	1 (a)	3	1	1.1.2 (a) 2.1.2 (r) 2.1.5 (c) 3.1.3(c)(ii) 4.2.1 (b) (ii) 3.1.1 (e) PAG 3,5,8,10	Development of practical skills in biology - Implementing	This question is about choice of apparatus in a range of different contexts.	
17	1(b) (i)	1	3	1.1.2 (a) 2.1.2(r)	Development of practical skills in biology - Implementing / Biological molecules	This question is about choice of apparatus in a range of different contexts.	
17	1(b) (ii)	1	3	1.1.2 (a) 1.1.4 (d) 2.1.2(r)	Development of practical skills in biology - Implementing / Biological molecules	This question is about choice of apparatus in a range of different contexts.	
18	1 (a) (i)	1	1	2.1.6 (c)	Cell division, cell diversity and cellular organisation	This question is about mitosis and the practical skill of completing a biological drawing	
18	1(a) (ii)	2	2	2.1.6 (c)	Cell division, cell diversity and cellular organisation	This question is about mitosis and the practical skill of completing a biological drawing	
18	1 (b)	3	2	1.1.2 (c) 2.1.6 (c) PAG 1	Cell division, cell diversity and cellular organisation / Development of practical skills in biology- Implementing	This question is about mitosis and the practical skill of completing a biological drawing	
18	1(c)	2	2	1.1.3(b), 2.1.6 (a)	Cell division, cell diversity and cellular organisation / Development of practical skills in biology - Analysis	This question is about mitosis and the practical skill of completing a biological drawing	
19	1 (a)	3	2	1.1.3(b) 3.1.3(b)i	Transport in plants / Development of practical skills in biology - Analysis	This question is about plant structures and tests practical skills	
19	1(b)(i)	3	2	1.1.3(b) 3.1.3(b)i	Transport in plants / Development of practical skills in biology - Analysis	This question is about plant structures and tests practical skills	
19	1(b) (ii)	1	2	1.1.3(b), 3.1.3 (b) (i)	Transport in plants / Development of practical skills in biology - Analysis	This question is about plant structures and tests practical skills	
19	1(c)(i)	3	1	3.1.3 (b) (i)	Transport in plants	This question is about plant structures and tests practical skills	
19	1 (c)(ii)	1	2	3.1.3 (a)	Transport in plants	This question is about plant structures and tests practical skills	
20	1(a) (i)	1	1	2.1.2 (m)	Biological molecules	This synoptic question is about biological molecules including an enzyme reaction data analysis	
20	1(a) (ii)	1	1	2.1.2 (m)	Biological molecules	This synoptic question is about biological molecules including an enzyme reaction data analysis	

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20	1(a) (iii)	1	1	2.1.2.(m)	Biological molecules	This synoptic question is about biological molecules including an enzyme reaction data analysis	
20	1(b) (i)	1	1	2.1.1 (k)	Cell structure	This synoptic question is about biological molecules including an enzyme reaction data analysis	
20	1(b) (ii)	2	2	2.1.2 (e)	Biological molecules	This synoptic question is about biological molecules including an enzyme reaction data analysis	
20	1(c) (i)	2	3	1.1.3(d), 2.1.4 (d) (ii)	Enzymes / Development of practical skills in biology - Analysis	This synoptic question is about biological molecules including an enzyme reaction data analysis	
20	1(c) (ii)	2	3	1.1.3(d), 2.1.4 (d) (ii)	Enzymes / Development of practical skills in biology - Analysis	This synoptic question is about biological molecules including an enzyme reaction data analysis	
21	1 (a)	5	1	4.1.1 (e)(i), (f) (g)	Communicable diseases, disease prevention and the immune system	This question is about the specific immune system and vaccines	
21	1 (b)	3	1	4.1.1 (j)	Communicable diseases, disease prevention and the immune system	This question is about the specific immune system and vaccines	