

Question number	Answer	Notes	Marks
1 (a)	1. named feeding level such as producer / consumer; 2. stage / position / place / level in food chain / pyramid / food web / eq;	ignore herbivore / carnivore	1
(b)	1. shape; 2. order; 3. names;	max 1 if food chain	3
(c)	1. fewer caterpillars; 2. fewer nettles / less food / eq; 3. colder / less light / eq; 4. become cocoon / pupa / butterfly / eq;	ignore hibernation	2
(d)	1. energy loss / not all transferred / eq; 2. respiration; 3. excretion / urine; 4. egestion / not digested / faeces / eq; 5. not all of each organism eaten / eq; 6. some organisms die / decompose / eq; 7. <u>movement</u> ; 8. heat loss / thermoregulation / eq;	ignore heat loss in Mp 1 ignore waste for Mp 3 and Mp 4	4

(Total for Question 10 = 10 marks)

Question number	Answer	Notes	Marks														
2 (a)	<table border="1"> <thead> <tr> <th>Letter</th> <th>Name of process</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>(fossilisation)</td> </tr> <tr> <td>B</td> <td>combustion / burning / eq;</td> </tr> <tr> <td>C</td> <td>respiration;</td> </tr> <tr> <td>D</td> <td>photosynthesis;</td> </tr> <tr> <td>E</td> <td>feeding / eating / consumption / ingestion / nutrition / digestion / assimilation / eq;</td> </tr> <tr> <td>F</td> <td>death;</td> </tr> </tbody> </table>	Letter	Name of process	A	(fossilisation)	B	combustion / burning / eq;	C	respiration;	D	photosynthesis;	E	feeding / eating / consumption / ingestion / nutrition / digestion / assimilation / eq;	F	death;	<p>ignore absorption</p> <p>ignore decomposition</p>	5
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2 (b) (i)	1. starch; 2. glucose; 3. cellulose; 4. sucrose; 5. fructose;		2
(ii)	DNA / deoxyribose nucleic acid;	allow RNA	1
(c)	1. greenhouse gas / greenhouse effect; 2. traps heat / infra red / long wavelength; 3. ice caps melt / rise in sea level / flooding; 4. habitat destruction / desertification / soil erosion / coral bleaching / forest fire / eq; 5. food chain disruption / extinction / eq; 6. migration / spread of disease / affects plant growth / eq; 7. climate change / extreme weather events / drought / eq;		5

(Total for Question 7 = 13 marks)

Question number	Answer	Marks
3 (a) (i)	greenfly <u>and</u> blue tit in correct order; secondary consumer; producer;	3
(ii)	bacteria / fungi;	1
(b)	three; allow decomposition, respiration and combustion	1

Total 5 Marks

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4(a)	<table border="1"> <thead> <tr> <th>Sentence</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>the number of animals is</td> <td>(8)</td> </tr> <tr> <td>the number of producers is</td> <td>1;</td> </tr> <tr> <td>the number of herbivores is</td> <td>4;</td> </tr> <tr> <td>the number of secondary consumers is</td> <td>4;</td> </tr> <tr> <td>the number of food chains is</td> <td>6;</td> </tr> </tbody> </table>	Sentence	Number	the number of animals is	(8)	the number of producers is	1;	the number of herbivores is	4;	the number of secondary consumers is	4;	the number of food chains is	6;		4
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4 (b) (i)	decrease / eq;	allow have a negative effect	1
(ii)	number of <u>same species</u> / number of <u>a species</u> / number of <u>one species</u> / eq;	allow amount / how many as eq to number	1
(c)	carbohydrate / glucose; protein / amino acids; fat / fatty acids / glycerol / cholesterol/ lipid; mineral / ions / salt / named mineral / named ion / named salt; vitamin / named vitamin; water;	ignore other blood components such as haemoglobin, rbc, platelets, oxygen and sugar etc	2
		Total	8

Question number	Answer	Notes	Marks
5 (a) (i)	all names present and parakeet in middle; arrows in right direction;		2
(ii)	digested / broken down; amylase / carbohydrase; maltose / glucose / sugar;	ignore enzyme ignore maltase ignore absorbed in small intestine	3
(b) (i)	25.5;;	allow one mark for 2 or 27.5 in working	2
(ii)	increase (volume of oxygen) / eq; (more) respiration; heat loss / eq;	ignore keep warm ignore reference to maintain body temperature	3
		Total	10