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. hape; 2. order; 3. ames;	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. movement; 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)

<table>
<tr><th>Question number</th><th>Answer</th><th>Notes</th><th>Marks</th></tr>
<tr><td>2 (a)</td><td>
<table>
<tr><th>Letter</th><th>Name of process</th></tr>
<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>
</table>
</td><td>ignore absorption

ignore decomposition</td><td>5</td></tr>
</table>

Question number	Answer	Notes	Marks
2 (b) (i)	1. starch; 2. lucose; 3. cellulose; 4. sucrose; 5. ructose;		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

<table>
<tr><th>Question number</th><th>Answer</th><th>Notes</th><th>Marks</th></tr>
<tr><td>4(a)</td><td>
<table>
<tr><th>Sentence</th><th>Number</th></tr>
<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>
</table>
</td><td></td><td>4</td></tr>
</table>

Question number	Answer	Notes	Marks
4 (b) (i)	decrease / eq;	allow have a negative effect	1
(ii)	number of same species / number of a species / number of one species / 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