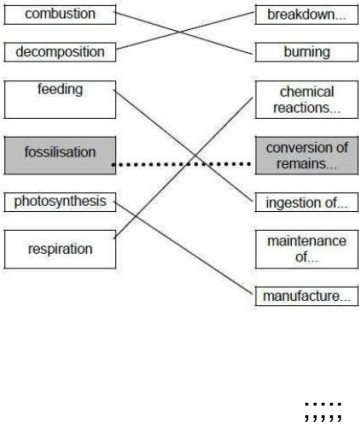


Question	Answer	Marks	AO Element	Notes	Guidance
1	C	1			
2	group of organisms of, one / same / (named) species ; living in the same place (at the same time) ;	2			
3	plant beetle frog snake ;	1			
4	position of a (named) organism(s) in a, food chain / food web / pyramid of number / pyramid of biomass / pyramid of energy ;	1			
5	war ; famine ; drought ; (named) disease ; natural disaster ; migration ; introduction of contraceptives ; pollution / contamination qualified ; decrease in medical care ;	2		max [2]	A introduction of restrictions on size of family A increase in death rate / decrease in birth rate

Question	Answer	Marks	AO Element	Notes	Guidance
6(a)(i)	willow (tree) and / or aquatic plants → moose → wolf arrows point from food to feeder ; organisms are in the correct order in the food chain ;	2		ignore the Sun at the start of the food chain	
6(a)(ii)	<i>the three organisms can be in any order in the table</i> willow tree / aquatic plants / shoots / plants – producer / 1 1 ; moose – primary consumer / 2 / 2 ; wolf – secondary consumer / 3 / 3 ;	3		ignore autotroph ignore herbivore ignore carnivore / top consumer	
7		4		4 or 5 correct = 4 marks 3 correct = 3 marks 2 correct = 2 marks 1 correct = 1 mark	

Question	Answer	Marks	AO Element	Notes	Guidance
8	B - 1 and 4	1			
9	A	1			
10	A - carbon dioxide	1			
11	(level) 3 / tertiary / secondary consumer ;	1			
12	<i>any three from:</i> population is constant then increases ; change occurs at 1700 ; rapid / exponential, increase (from 1800) ; correct data quoted ;	3			
13	thrush ;	1			

Question	Answer	Marks	AO Element	Notes	Guidance
14	<p><i>any three from:</i> damage / destroy, (marine) habitats ; extinction of species ; ref. to pollution (of sea) ; global warming / ref. to increase in sea temperature ; rise in sea levels / melting of ice-caps ; overfishing / disruption of food chain ;</p>	3			
15	<p><i>any three from:</i> increased food production ; increased medical, facilities / care ; better, sanitation / clean water / sewage facilities ; increased hygiene ; increased (health) education ;</p>	3			
16	protein / urea / amino acid ;	1			

Question	Answer	Marks	AO Element	Notes	Guidance
17	 <p>..... *****</p>	5			
18	<p>organism that makes its own (organic) nutrients ; (usually) using energy from sunlight / through photosynthesis ;</p>	2			
19	<p>arrow from 'carbon dioxide in the atmosphere' to 'carbon compounds in plants' box and labelled D ;</p>	1			
20	<p>A combustion ; B feeding ; C fossilisation ;</p>	3			
[Total: 42]					