

Multiple Choice Answers

Q31: D
Q37: C
Q38: B

Multiple Choice Answers

Q38: B
Q40: C

4(a)(i)	grasshopper / marmot ;
4(a)(ii)	grass → grasshopper → marmots / (corsac) fox → (steppe) eagle ;
4(a)(iii)	<i>any two from:</i> <i>idea that</i> energy is lost between each trophic level ; named example of energy loss ; if less energy available then less biomass can be supported ;
4(b)(i)	<i>any three from:</i> 1 little genetic variation ; 2 increased risk of, genetic / inherited, disease ; 3 <u>inbreeding</u> / <u>inbred</u> ; 4 decreased heterozygosity / greater chance that an organism may be homozygous (recessive) ; 5 less likely to adapt to changes in the, environment / AW ; 6 increased susceptibility to (transmissible) disease ; 7 AVP ;
4(b)(ii)	<i>any four from:</i> 1 (named) protection of habitat ; 2 ref to legislation protecting species / banning hunting ; 3 monitoring / tracking / named example of monitoring ; 4 education / awareness campaigns ; 5 provision of (named), food / nutrients / veterinary care ; 6 removal of predators ; 7 removal of invasive species ;
4(c)	X – fertilisation ; Y – mitosis / cell division ; Z – implantation ;

6(a)(i)	<i>any two from:</i> less (land) covered by forest ; more fragmented forest ; less forest around the coast / AW ;
6(a)(ii)	<i>any two from:</i> 1 housing / AW ; 2 agriculture / AW ; 3 (logging), for timber / fuel / paper ; 4 extraction of natural resources ; 5 wildfires ; 6 climate change ; 7 disease / invasive species ;
6(b)	T photosynthesis ; U (aerobic) respiration ; V combustion ;
6(c)(i)	<i>any three from:</i> 1 decrease in photosynthesis leads to less carbon dioxide removed from atmosphere ; 2 increase in decomposition of felled trees leads to more carbon dioxide added to the atmosphere ; 3 increase in combustion of felled trees leads to more carbon dioxide added to the atmosphere ; 4 carbon dioxide traps, infrared / long wavelength, radiation (from the ground) ; 5 increase / enhanced, greenhouse effect ;
6(c)(ii)	<i>any three from:</i> 1 loss of habitat ; 2 extinction of species ; 3 reducing biodiversity ; 4 disrupt cycling of nutrients ; 5 disrupt, energy flow / food web / food chain ; 6 loss of possible, fuels / crop plants / drugs / genes ; 7 soil erosion / infertile land ; 8 (more run off) flooding ; 9 (fewer trees means) less transpiration / less water vapour in the atmosphere ; 10 so less rainfall / droughts / desertification ; 11 AVP ;