

Multiple Choice Answers

Q23: A

Q24: A

Multiple Choice Answers

Q28: D

4(a)(i)	<i>any three from:</i> scent ; nectar ; large / colourful, petals ; pollen (as a source of food) ; AVP ;
4(a)(ii)	<i>any one from:</i> large ; sticky / spiky / AW ;
4(b)	<i>any two from:</i> <i>(monocots have)</i> narrow / strap / long/AW, leaves ; parallel (leaf) veins ; scattered vascular, tissue / bundles, (in the stem) ; hollow stems ; petals in multiples of three ; fibrous roots ; one cotyledon ; pollen grains have one pore or furrow ; AVP ;;
4(c)	filament labelled ; sepal labelled ; an ovule labelled ;

4(d)	<i>any five from:</i> 1 pollen (released) from the anther ; 2 pollen transferred to stigma ; 3 <u>pollen tube</u> , grows ; 4 (pollen tube goes) down / through, the style ; 5 ref. to ovule / ovary ; 6 pollen / male, nucleus travels down the (pollen) tube / style ; 7 pollen / male, and, ovule / female, <u>nuclei</u> fuse ; 8 fertilisation ; 9 AVP ;
4(e)(i)	sperm (cell) ;
4(e)(ii)	testis / testes ;
4(e)(iii)	meiosis ;
4(e)(iv)	make fluid / semen, for the sperm / male gametes, to swim / AW ;

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 – <u>implantation</u> ;

Multiple Choice Answers

Q30: B

Multiple Choice Answers

Q26: D