

INDIAN SCHOOL MUSCAT
FIRST PRELIMINARY EXAMINATION
JANURARY 2019

SET C

CLASS XII

Marking Scheme – BIOLOGY [THEORY]

Q.NO.	Answers	Marks (with split up)
5	Enough time gap is not being given for the natural process of recovery of land from the effect of cultivation	1
6	When breeding is between animals of the same breed, it is called inbreeding, while cross between different breeds is called out breeding	1+1
10	Insulin production ,treatment of genetic disorders with gene therapy as in ADA deficiency	1+1
15	Darwin's theory of Natural selection: 3 Any population has built in variation for every character. Individuals with those characters which enable them to survive better would outbreed the others, who are less adapted. Fitness, according to Darwin's is reproductive fitness, i.e., individuals who are better fit in an environment leaves more progeny than others. These progenies now comes to possess more fit individuals, i.e., nature selects the better fit individuals and over a long period of time, through a number of generations, the population slowly becomes modified into a different form, or a species, which is called evolution	1+1+1
18	Spermatogonia – primary spermatocyte – meiosis-secondary spermatocyte – spermatid – sperm	$\frac{1}{2} \times 6=3$
22	Bottle juices are clarified by the use of pectinase and proteases Lipase added to detergent for better cleaning efficiency.	1+1+1
26	Menstrual phase – flow follicular phase – follicular growth regeneration of endometrium Ovulation , secretory phase – corpus luteum LH ,FSH role OR Non –synchronisation of stigma receptivity and pollen release , different positions , self-incompatibility,unisexual flowers /xenogamy	1 x 5