

INDIAN SCHOOL MUSCAT
FIRST PRELIMINARY EXAMINATION
JANURARY 2019

SET B

CLASS XII

Marking Scheme – BIOLOGY [THEORY]

Q.NO.	Answers	Marks (with split up)
	UNCOMMON QUESTIONS	
2	20%	1
5	Aedis mosquito	1
8	The collection of all the diverse alleles of all the genes of crop plant is called germ plasm collection In plant breeding programmes, the germplasm provides the entire of genes and alleles, and the characteristics which they express. The plant breeders select the most favourable characters of a particular gene and manipulate its transfer to a desirable parent. OR Brandy/Beer	1+2=3
11	eurythermal and stenothermal with definition	1+1
14	Paleontology is the study of fossils. It indicates The geological time period in which the organisms existed. That life forms varied over time and certain life forms are restricted to certain geological time pans. That new forms of life have appeared at different times in the history of earth.	1+1+1
17	Periodic abstinence , withdrawal , lactational amenorrhea	1+1+1
20	No. To eat mosquito larvae. It is a method of biological control OR The BOD test measures the rate of uptake of oxygen by microorganisms in a sample of water.Biological treatment or Secondary treatment Sample . C. is most polluted because it has highest BOD level among the three samples of water.	1+1+1
23	Grass,phytoplanktons,GPP is the rate of Biomass production /g/yr whereas NPP is 1+1+1 the rate of Biomass converted into plant matter and available for the consumers (NPP=GPP-Respiration),Oceans have less solar energy available compared to land hence productivity is lower.	

24	<p>Cross 1:2:1 for both Incomplete dominance with definition</p> <p>OR DNA polymerase, unwind, new strand 5'-3'. Deoxyribonucleotide triphosphates added. Leading and lagging strands. Ligase. diagram</p>	2+2+1
26	<p>Breakdown of complex organic matter by decomposers. a) Process- i) fragmentation ii) leaching iii) catabolism. Humification and mineralization – humification leads to accumulation of dark coloured substance called humus. Mineralisation results in release of inorganic substances a) climatic factor – i) temp ii) soil b) chemical quality of detritus. High temp and moist condition – high rate of decomposition. Dry soil, High temp – Low rate</p> <p>OR a) Conventional sedimentation, filtering and chlorine treatment. Absorption and assimilation of pollutants by algae, fungi and bacteria. (b) .Ecosan. derived from ecological sanitation. Handling human excreta using dry composting toilets. Its practical, hygienic and cost effective method.</p>	<p>2 ½ + 2 ½</p> <p>2+3=5</p>