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SET C



INDIAN SCHOOL MUSCAT

FIRST PERIODIC TEST

Biology

CLASS: XII

Sub.Code: 044

Time Allotted: 50mts.

24 .04.2022

Max .Marks: 20

MARKING SCHEME		
	SECTION A	
1.	How do pollengrains of Vallisnaria protect themselves? Pollen grains are produced under water, so they have mucilaginous coating to prevent from wetting.	1
2.	Define Apomixis. Development of seed without fertilization.	$\frac{1}{2} + \frac{1}{2}$
	SECTION B	
3.	Define Pollen Pistil interaction. All the events from pollen deposition on the stigma until pollen tubes enter the ovule are together referred to as pollen pistil interaction.	2
4.	Differentiate between albuminous and non albuminous seeds, giving one example each. Albuminous - endosperm is not completely utilised during the embryo development. eg Castor Non-albuminous - endosperm is completely utilised during the embryo development.	2

	Eg . Pea	
5.	Draw the diagram of a typical anatropous ovule and label any 4 parts.	2
	SECTION C	
6.	<p>Explain double fertilisation in angiosperms.</p> <p>There are two male gametes.</p> <p>One gamete fuses with the egg cell</p> <p>Syngamy results in zygote formation</p> <p>Second gamete fuses with the polar nuclei</p> <p>This is called triple fusion</p> <p>Results in the formation of PEN ($6 \times \frac{1}{2}$)</p>	3
7.	<p>Differentiate between the three types of pollination in angiosperms.</p> <p>Autogamy – within the flower</p> <p>Geitonogamy – Between two flowers of the same plant</p> <p>Xenogamy – Between two flowers of two different plants.</p>	3
8.	<p>Describe three out breeding devices employed by angiosperms.</p> <ol style="list-style-type: none"> 1. Unisexual flower 2. No synchrony between anther release and stigma receptivity. 3. Anther and stigma at different levels. 4. Self incompatibility (any three) 	3
9.	<p>Describe the development of pollen grain inside the microsporangia. Name the inner most wall layer of microsporangium and write its function.</p> <p>Microsporangia contains sporogenous tissue.</p> <p>The cells are called PMC</p> <p>PMC undergoes meiosis to form pollen tetrad</p> <p>Pollen tetrad undergoes dehydration to form pollen grains.</p> <p>Tapetum</p>	3

	Provides nutrition $\frac{1}{2} \times 6$	
	End of the Question Paper	

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NAME OF THE EXAMINATION	FIRST PERIODIC TEST	CLASS: X/XII
DATE OF EXAMINATION		SUBJECT:

