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**Max Time : 1 hr** **Class = 12th Biology Test**  **Max Marks : 20**

**SEXUAL REPRODUCTION IN FLOWERING PLANTS**

**[Microsporogenesis , Megasporogenesis , Type of pollination]**

1. Multiple choice questions : [ 1 X 5 = 5]
2. Ubish bodies are produced by :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Middle layers | b) Tapetal cells | c) Pollen mother cell | d) Endothecium |

1. Egg apparatus consists of :

|  |  |
| --- | --- |
| a) egg cell and antipodal | b) egg cell and central cell |
| c) egg cell and two synergids | d) egg cell and one synergids |

1. Palynology is connected with the study of :

|  |  |  |  |
| --- | --- | --- | --- |
| a) pollen grains | b) Palms | c) flowers | d) Fruits |

1. Germ pore/germinal furrow present on the surface of pollen grain represents :

|  |  |
| --- | --- |
| a) an area where exine is thin or absent | b) specialized thickening of exine |
| c) specialized thickening of intine | d) area where tapetum is absent |

1. Polygonum type of embryo sac/typical female gametophyte of angiosperms is :

|  |  |
| --- | --- |
| a) 7 – celled , 7 – nucleated | b) 7 – celled , 8 – nucleated |
| c) 8 – celled , 7 – nucleated | d) 8 – celled , 8 – nucleated |

1. Give an example of a plant which came into India as contaminated and is cause of pollen allergy. [ 1 ]
2. An anther with malfunctioning tapetum often fails to produce viable male gametophytes. Give reason. [ 1 ]
3. What is meant by Monosporic development of a female gametophyte? [ 1 ]
4. Name the organic material exine of pollen grain is made up of. How is this material advantageous to pollen grain? [ 1 ]
5. How are ‘pollen banks’ useful? [ 1 ]
6. What are chasmogamous flower? Can cross pollination occur in cleistogamous flowers? Give reason for your answer. [ 2 ]
7. Why are angiosperm anthers called dithecous? Describe the structure of its microsporangium. [ 2 ]
8. Differentiate between Geitonogamy and Xenogamy in plants. Which one between the two will lead to inbreeding depression and why? [ 3 ]
9. Trace the development of mega spore mother cell up to the formation of a mature embryo sac in an angiosperm? [ 3 ]