



# Bhartiyam International School

Pre – Mid Term Assessment (2022 -23)

Subject: Biology

Class: XII

Roll No. \_\_\_\_\_

Date: 15/07/2022

Name: \_\_\_\_\_

M.M:40

Duration: 90 mins

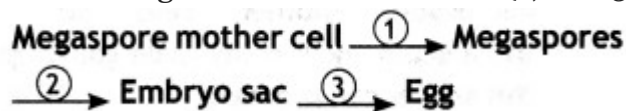
## General instructions :

1. This question paper contains 17 questions.

2. Question no. 1 to 5 are of 1 mark each. Question no. 6 to 10 are of 2 marks each. Question no. 11 to 15 are of 3 marks each. Question no. 16 and 17 are of 5 marks each.

3. Make diagrams wherever required.

1. Indicate the stage where meiosis occurs (1, 2 or 3) in the flow chart. 1



2. How many sperms will be produced from 10 primary spermatocytes and how many eggs will be produced from 10 primary oocytes? 1

3. Name the substance present in the sperm acrosome & which helps in sperm entry into egg. 1

4. Give the scientific name of a plant which came to India as a contaminant with imported wheat and causes pollen allergy. 1

5. Define parturition. 1

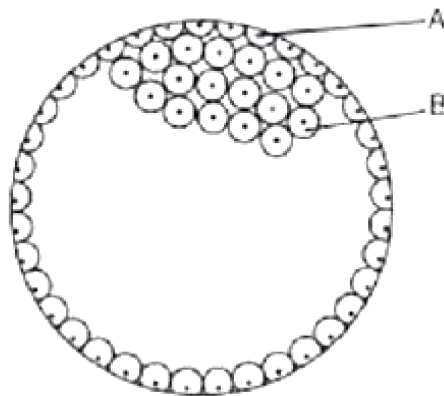
6. Give the function of : 2

(a) Corpus luteum      (b) Endometrium

7. What relationship exists between a species of moth and Yucca plant? 2

8. Why are cleistogamous flowers invariably autogamous? 2

9. In the given figure, give the name and functions of parts labeled A and B. 2

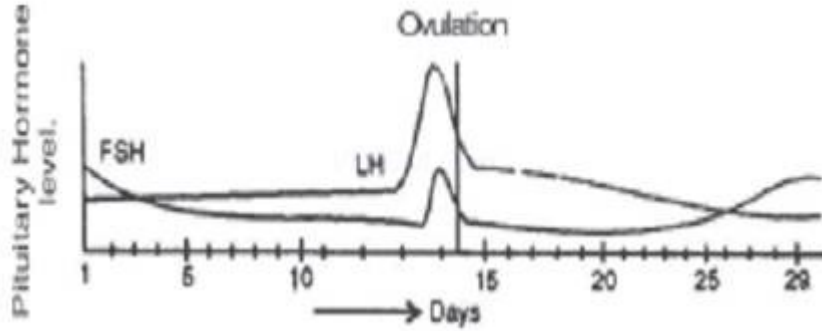


10. An anther with malfunctioning tapetum often fails to produce viable male gametophyte? Give one reason? 2

11. What is apomixis? What is its importance? 3

12. Explain the structure of an anatropous ovule with a neat labeled diagram? 3

13. (a) Read the graph given below. Correlate the ovarian events that take place in the human female according to the level of the pituitary hormone during the following day. 3



- (i) 10th – 14th days                      (ii) 14th -15th days  
 (iii) 16th – 23th days                    (iv) 25th – 29th days  
 (If the ovum is not fertilised)
- (b) What are the uterine events that follow beyond 29th day if the ovum is not fertilised?
14. Three of the steps of neuro endocrine mechanism in respect of parturition are mentioned below. Write the missing steps in proper sequence. 3
- (a) Signals originate from fully developed foetus and placenta.  
 (b) \_\_\_\_\_.  
 (c) \_\_\_\_\_.  
 (d) Oxytocin causes strong uterine contraction  
 (e) Uterine contraction stimulates further secretion of oxytocin.  
 (f) \_\_\_\_\_.
15. Continued self pollination lead to inbreeding depression. List three devices, which flowering plant have developed to discourage self pollination? 3
16. A woman has conceived & implantation has occurred within her uterus. Discuss the sequence of changes up to parturition which will take place within her body under the influence of various hormones. 5
17. i) Why is zygotes dominant for sometime in fertilized ovule. 1+1+3  
 ii) What is polyembryony? Give an example.  
 iii) In fruits, what is formed from following parts :-  
 a) Ovary wall    b) Outer integument    c) Inner integument    d) zygote  
 e) primary endosperm    f) Ovary