## **M.M:20** Time: 40mts

## **General Instructions: -**

This question paper consists of three sections A, B, C. Section A contains 5 questions of 1mark each, section B is of 3questions of 2 marks each, section C is of 3 questions of 3 marks each.

INDIAN SCHOOL SOHAR

UNIT TEST I

**BIOLOGY** 

- All questions are compulsory.
- Ouestions of section A are of multiple choice question, section B to be answered in approximately 20-30 words each and section C in **30-50** words each

b. free nuclear endosperm.

Number of nuclei left in

central cell

3

a

1 3 7

## **SECTION-A**

- 1. The coconut water from tender coconut is
  - a. cellular endosperm.

Number of cells

at chalazal end

3

а

c. both cellular and nuclear endosperm.

2. In the figure of anatropous ovule given below, choose the correct option for the characteristic distribution of cells within the typical embryo sac

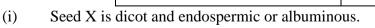
3 2 3 b 2 3 3 с 2 2 4 d

Number of cells at

micropylar end

3. Which of the following statements are true related to Seed X and Y?.

2

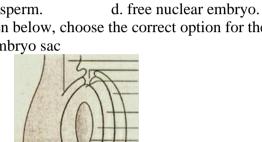


- Seed X is dicot and non-endospermic or non-albuminous. (ii)
- Seed Y is monocot and endospermic or albuminous. (iii)

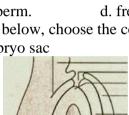
Seed Y is monocot and non-endospermic or non-albuminous. (iv)

Choose the correct option with the respect to the nature of the seed

- b. (ii), (iii) a. (i), (iii)
- c. (i), (iv) d. (ii), (iv) (1)



eed X	Seed Y
pot and and oppermis or albuminous	



(1)

(1)

a. sporopollenin	b.	
cellulose	c. lignocelluloses	
d. pectocellulose (1)		
5. Select the correct option of haploid cells from the following		
groups	a. Meiocyte, Pollen grain, Tapetum	
b. Synergids, Antipodals, Ovum		
c. Sporogenous cell, Megaspore mother cell.	. Megaspore	
d. Megaspore mother cell. Megaspore, Nucellus		

## **SECTION-B**

6. Draw a sectional view of seminiferous tuble in humans showing spermatogenesis and label the parts. (2)

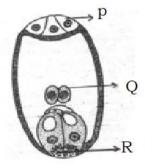
7. Cleistogamous flower of Commelina are invariably auogamous. Mention one advantage and

one disadvantage to the plant

(2)

8. (a) Identify the parts marked P and R in the given figure.(b) Mention the role played by the part labeled 'Q'.

(2)



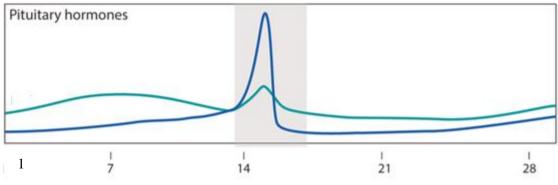
SECTION-C

- 9. Draw schematic diagram of T.S of a mature anther. Label only the layers that help in dehiscence
- of the anther to release pollen grain
- b) Why is exine of the pollen not a continuous layer (3)
- 10. 'Incompatibility is a natural barrier in fusion of gametes" Justify the statement. (3)
- 11. a) Study the graph below and correlate the events that takes place in the ovary according (3) to the hormonal levels on

(i)  $14^{\text{th}} \text{day}$  (ii)  $16^{\text{th}} - 25^{\text{th}} \text{day}$ 

(ii) What would happen if the ovum is not fertilized on 26<sup>th</sup> to 28<sup>th</sup> day?

(c) Label the hormones a and b.



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