

Total No. of Printed Pages—3:

**5 SEM TDC BOTH (CBCS) C 11**

**2 0 2 2**

( Nov/Dec )

**BOTANY**

( Core )

Paper : C-11

**( Reproductive Biology of Angiosperms )**

*Full Marks : 53*

*Pass Marks : 21*

*Time : 3 hours*

*The figures in the margin indicate full marks  
for the questions*

1. (a) Choose the correct answer from the following : 1×3=3
- (i) The edible part of litchi is pericarp/ endosperm/ aril.
  - (ii) The wall layer of microsporangium which provides nourishment to developing microspores is called anther wall/tapetum/exine.
  - (iii) The development of endosperm of arecanut is cellular/nuclear/helobial type.

( 2 )

(b) Fill in the blanks :  $1 \times 2 = 2$

(i) The entry of the pollen grain into the ovule through the chalaza is called \_\_\_\_\_.

(ii) When the micropyle, chalaza and funicle of an ovule lie on one straight line, it is called \_\_\_\_\_.

2. Write precise notes on the following (any three) :  $4 \times 3 = 12$

(a) Bisporic embryo sac

(b) Induction polyembryony

(c) Helobial endosperm

(d) Significance of pollination

(e) Induction of flowering

3. What do you mean by double fertilization?

Write in detail about the process of double fertilization. Give diagram where necessary.

$3 + 7 + 2 = 12$

Or

Write explanatory notes on the following :

$6 + 6 = 12$

(a) Haustorial structures of endosperms

(b) Palynology and its significance

( 3 )

4. What do you mean by embryo-endosperm relationships? With illustration, write briefly on unusual development of embryo in *Paeonia*.  $2 + 10 = 12$

Or

Write notes on the following :  $4 \times 3 = 12$

(a) Obturator

(b) Aril

(c) Caruncle

5. Write explanatory notes on the following :

$6 + 6 = 12$

(a) Megagametogenesis

(b) Methods to overcome self-incompatibility

Or

What is parthenocarpy? Write briefly on the causes and their application.  $2 + 5 + 5 = 12$

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