

**63/1 (SEM-5) CC11/BOTHC5116**

**2022**

( Held in 2023 )

**BOTANY**

Paper : BOTHC5116

( **Reproductive Biology of Angiosperm** )

Full Marks : 60

Pass Marks : 24

Time : 3 hours

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

1. Choose the correct answer from the following : 1×5=5

(a) Pollinium contains

- (i) pollinia, viscidium, stipe
- (ii) pollinia, viscidium, caudicle, stipe
- (iii) pollinia, caudicle, viscidium
- (iv) pollinia, caudicle, stipe

(b) Who first demonstrated double fertilisation in Angiosperm among four?

- (i) P. Maheshwari
- (ii) G. B. Amici
- (iii) E. Strasburger
- (iv) W. Hofmeister

( 2 )

- (c) Suspensor is found
- (i) towards the radicular end
  - (ii) towards the chalazal end
  - (iii) towards the on the cotyledon
  - (iv) None of the above
- (d) Ruminant endosperm is seen in
- (i) coconut
  - (ii) areca nut
  - (iii) maize seed
  - (iv) mango seed
- (e) Pollination which occurs in closed flowers is known as
- (i) allogamy
  - (ii) cleistogamy
  - (iii) protogamy
  - (iv) None of the above

2. Answer the following questions in short :  
2×5=10

- (a) What is double fertilization?
- (b) What do you mean by a cybrid?

( Continued )

( 3 )

- (c) What is ABC model of floral organ development?
- (d) Draw the labelled diagram of a pollinium.
- (e) Write a note about an In Vitro Fertilization (IVF).

3. Answer any five of the following questions :  
5×5=25

- (a) Discuss the scope of embryology.
- (b) Define palynology. Mention the scope of palynology.
- (c) Write a note on Endothelium.
- (d) Distinguish between the cross-pollination and self-pollination.
- (e) Discuss in detail the different methods to overcome self-incompatibility.
- (f) Write about the different mechanisms of seed dispersal.
- (g) Mention the causes and significance of polyembryony.

( Turn Over )

KB23/126

KB23/126

4. Answer any *two* of the following questions :

10×2=20

- (a) What is microsporogenesis? Describe the process of microsporogenesis with suitable diagram. 2+8=10
- (b) Define apomixis. Describe its types and mention the significance of apomixis. 2+8=10
- (c) Define endosperm. Describe its types with suitable diagram. 2+8=10

\*\*\*