

S.Y.B.SC. SEM – III (2014 Course) : WINTER - 2018

SUBJECT: BOTANY: DEVELOPMENTAL BOTANY & EMBRYOLOGY (B -32)

Day: Wednesday  
Date: 24/10/2018

W-2018-0807

Time: 12.00 NOON TO 02.00 PM  
Max. Marks: 40

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**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Draw neat and labelled diagrams **WHEREVER** necessary.
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**Q.1** Attempt **ANY TWO** of the following: **(10)**

- a) What are permanent tissues? Give their functions.
- b) Explain types of trichomes with suitable examples.
- c) Give an account of distribution of mechanical tissues in Maize stem.

**Q.2** Attempt **ANY TWO** of the following: **(10)**

- a) Describe anomalous secondary growth in *Bignonia* stem.
- b) Describe the process of normal secondary growth in Dicot stem.
- c) Explain Tunica-carpous theory of meristematic tissues.

**Q.3** Attempt **ANY TWO** of the following: **(10)**

- a) Give an account of development of male gametophyte.
- b) Describe various types of ovule with suitable example.
- c) Comment on significance of double fertilization.

**Q.4** Attempt **ANY FIVE** of the following: **(10)**

- a) Enlist types of megaspore tetrad.
- b) What is siphonogamy?
- c) Explain in brief cellular type of endosperm.
- d) Enlist any two types of monosporic embryo sac.
- e) Give types of tapetum.
- f) Sketch and label structure of typical eight nucleate embryo sac.
- g) What is chalazogamy?

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