

S.Y.B.SC. SEM – III (2014 COURSE) : WINTER - 2017
SUBJECT: BOTANY: DEVELOPMENTAL BOTANY & EMBRYOLOGY (B -32)

Day: **Wednesday**
Date: **08/11/2017**

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

W-2017-0622

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labelled diagrams **WHEREVER** necessary.

Q.1 Attempt **ANY TWO** of the following: **(10)**

- a) Give general characters of mechanical tissues with their functions.
- b) Describe primary structure of dicot stem.
- c) Comment of permanent tissues and give their various types.

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

- a) Define ovule and their structure and types.
- b) What is embryology? Give their scope and importance.
- c) Describe development of male gametophyte.

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

- a) What is anomalous secondary growth? Explain it with respect to *Boerhaavia* stem.
- b) What are trichomes? Describe its various types with suitable example.
- c) Give structure of typical stoma and give their functions.

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

- a) Explain in brief development of nuclear endosperm.
- b) Sketch and label typical pollen grain.
- c) Differentiate between collenchyma and parenchyma tissues.
- d) Enlist different types of embryo sacs.
- e) Give significance of double fertilization.
- f) What is microsporogenesis?
- g) Write a note on self-incompatibility.

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