

S.Y.B.SC. SEM – III (2014 COURSE) : SUMMER - 2018

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

Day : **Friday**
Date : **27/04/2018**

S-2018-0714

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

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate full marks.
 - 3) Draw and neat labeled diagrams **WHEREVER** necessary.
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Q.1 Attempt any **TWO** of the following: **(10)**

- a) Describe primary structure of Dicotyledonous root.
- b) Explain histogen theory of meristematic tissue.
- c) Give functions of mechanical tissue.

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

- a) What is trichome? Explain its various types with suitable example.
- b) Describe anomalous secondary growth in *Bignonia*.
- c) Give structure and types of stoma.

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

- a) Give process of microsporogenesis. Explain its types studied by you.
- b) Draw and describe any two types of ovules.
- c) Comment on development of monosporic embryo sac.

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

- a) Define embryology and give its scope.
- b) Give structure of pollen grain.
- c) Explain process of entry of pollen tube during fertilization.
- d) Give significance of double fertilization.
- e) Write a note on self-compatibility.
- f) Explain the structure of helobial endosperm.
- g) Comment on types of tapetum.

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