

T.Y.B.SC. SEM – VI (2014 COURSE) : SUMMER - 2018
SUBJECT : BOTANY : BIOLOGY OF SEED PLANTS
(GYMNOSPERMS AND PALEOBOTANY)

Day : **Thursday**
Date : **12/04/2018**

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

S-2018-0769

N. B. :

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

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

- a) Explain classification of gymnosperms according to Birbal Sahani.
- b) Describe male cone of *Zamia*.
- c) Explain female cone of *Pinus*.

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

- a) Describe mycorrhizal roots of *Pinus*.
- b) Explain classification of gymnosperms according to Chamberlain.
- c) Give external morphology of *Thuja*.

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

- a) Describe male cone of *Gnetum*.
- b) Give morphological characters of *Cycadeoidea*.
- c) Explain distribution of gymnosperms in India.

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

- a) Enlist general characters of gymnosperms.
- b) Give structure of pollen grain in *Pinus*.
- c) Enlist economic importance of gymnosperms.
- d) Explain megasporophyll of *Cycas*.
- e) Describe mycorrhizal roots of *Pinus*.
- f) Explain coralloid roots in *Cycas*.
- g) Give affinities of *Gnetum* with angiosperms.

* * * * *