

Roll No.

Exam Code : M-21

Subject Code—52540

B. Sc. EXAMINATION

(Batch 2017 Re-appear)

(Third Semester)

BOTANY

First Paper

Biology and Diversity of Seed Plants-I

Time : 3 Hours

Maximum Marks : 40

Note : Attempt *Five* questions in all, selecting *two* questions from each Unit. Q. No. **1** is compulsory (short answer type). All questions carry equal marks.

1. (a) What is Coralloid root ? 1
- (b) Name the anti-asthmatic drug obtained from *Ephedra*. 1
- (c) What is 'Shower of Sulphur' ? 1

- (d) What is the function of Transfusion tissue ? 1
- (e) Differentiate between Siphonogamy and Zoodiogamy. 1
- (f) Give the botanical name of 'Sago Palm'. 1
- (g) What is Petrification ? 1
- (h) What is Geological Time Scale ? 1

Unit I

- 2. Define a fossil. Describe the various processes of fossilization. 8
- 3. Write notes on the following :
 - (a) Evolution of seed habit 4
 - (b) Male and female reproductive structures of *LYGINOPTERIS*. 4
- 4. Describe the reconstruction of *WILLIAMSONIA*. 8
- 5. Discuss the Pilger and Melchior's (1954) system of classification of gymnosperms. 8

Unit II

- 6. Draw well labelled diagrams only :
 - (a) T.S. of Coralloid root of *CYCAS* 4
 - (b) L.S. of Male cone of *PINUS*. 4
- 7. Differentiate between the following :
 - (a) Male and Female cone of *PINUS* 4
 - (b) Manoxylic and Pycnoxylic wood. 4
- 8. With well labelled diagrams, describe the reproduction in *EPHEDRA*. 8
- 9. Write notes on the following :
 - (a) Economic importance of *CYCAS* 4
 - (b) Primitive characters of Angiosperms. 4