# 2/EH-62 (ii) (Syllabus-2015)

(2)

#### 2021

(July)

**BOTANY** 

(Elective/Honours)

( Gymnosperms, Paleobotany, Morphology and Anatomy )

(BOTELH-201)

Marks: 56

Time: 3 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, including Question No. **1** which is compulsory. Answer only **one** question from each Section

- **1.** Write short notes on the following:  $4 \times 4 = 16$ 
  - (a) Major fossil discoveries in India
  - (b) Cycas male cone
  - (c) Korper-Kappe theory
  - (d) Types of stipules

#### SECTION—I

- **2.** Describe the development of male and female gametophytes in *Pinus*. 5+5=10
- **3.** Describe in detail the following: 5+5=10
  - (a) LS of Cycas ovule
  - (b) Angiospermic characters of Gnetum

## SECTION—II

- **4.** Give a detailed account on dominant Jurassic flora.
- **5.** Write notes on the following: 5+5=10
  - (a) Geological Time Scale
  - (b) Types of fossils based on fossilization process

### SECTION—III

- **6.** What is stamen? Describe its evolutionary trends. 2+8=10
- **7.** Give explanatory notes on the following :

5+5=10

- (a) Phyllotaxy
- (b) Cymose inflorescence

## SECTION—IV

- **8.** With the help of diagrams, describe different types of stomata in both dicot and monocot leaves. 4+6=10
- **9.** Explain the following: 5+5=10
  - (a) Anomalous secondary growth in a monocot stem
  - (b) Components of phloem

\*\*\*