2/EH–62 (ii) (Syllabus–2015)

2016

(April)

BOTANY

(Elective/Honours)

SECOND PAPER

(Gymnosperm, Paleobotany, Morphology and Anatomy)

Full Marks: 56

Time: 3 hours

The figures in the margin indicate full marks for the questions

Answer Question No. 1 which is compulsory and four from the remaining, selecting one from each section

- 1. Give accounts of the following: 4×4=16
 - (a) Economic importance of gymnosperms
 - (b) Aestivation types
 - (c) Fascicular and interfascicular cambium
 - (d) Williamsonia sewardiana

SECTION—I

- 2. Discuss the development of male gametophyte in *Pinus*.
- **3.** Discuss the following: $5\times2=10$
 - (a) Affinities of gymnosperms with pteridophytes
 - (b) Angiospermic characters of Gnetum

SECTION—II

- 4. What are the different eras in the geological time scale? Discuss the dominant Jurassic flora.

 2+8=10
- 5. What are fossils? Describe the different types of fossilisation processes. 2+8=10

SECTION—III

- 6. With the help of suitable diagrams, describe the different types of inflorescence.
- 7. What is a stamen? Discuss its evolutionary trends. 1+9=10

SECTION-IV

- 8. Give an illustrated account of the different types of stomata in angiosperms.
- 9. Write notes on the following: 5+5=10
 - (a) Components of xylem
 - (b) Tunica-corpus theory
