

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

2017

(April)

BOTANY

(Elective)

(BOTELH-201)

(Gymnosperms, Paleobotany, Morphology
and Anatomy)

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions in total including Question
No. 1 which is compulsory and select remaining
four questions **one** from each Section

1. Write short notes on the following : $4 \times 4 = 16$

(a) Male cone of *Pinus*

(b) Geological timescale

(c) Different types of placentation in
angiosperms

(d) Structure and functions of phloem
tissue in angiosperms

(Turn Over)

Section—I

2. Describe development of male gametophyte and female gametophyte in *Cycas*. 5+5=10
3. Describe the reproductive structures of *Gnetum*. Mention angiospermic characters of *Gnetum*. 5+5=10

Section—II

4. Describe different types of plant fossils and their formations. 6+4=10
5. Give an account of Cycadofilicales. 10

Section—III

6. Give different forms of anthers in flowers of angiosperms giving examples with sketches. 10
7. Give an account of the structure and evolution of carpel in angiosperms. 10

Section—IV

8. Describe organization of shoot apical meristem in angiosperms. 10
9. Describe the process of secondary growth in stems of dicotyledonous plants giving suitable sketches. 10
