

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

2 0 1 9

(April)

BOTANY

(Elective/Honours)

**(Gymnosperms, Palaeobotany,
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, selecting one
from each Section**

- 1. Write short notes on the following : 4×4=16**
- (a) Economic importance of gymnosperms**
 - (b) Process of fossilization**
 - (c) Types of placentation in angiosperms**
 - (d) Structure and functions of stomata**

(2)

SECTION—I

2. Describe the development of male and female gametophyte in *Cycas*. 5+5=10
3. Discuss the following : 5+5=10
- (a) Anatomy of *Pinus* needle
 - (b) Male and female inflorescence of *Gnetum*

SECTION—II

4. Give an account of Cycadofilicales. 10
5. What are the different eras in the geological time scale? Discuss the dominant Jurassic flora. 2+8=10

SECTION—III

6. With the help of suitable diagrams, describe the different types of racemose inflorescence. 10
7. What is carpel? Discuss its evolutionary trends. 2+8=10

D9/1609

(Continued)

(3)

SECTION—IV

8. Describe the organization of shoot apical meristem in angiosperms. 10
9. With the help of suitable diagrams, describe the following : 5+5=10
- (a) Components of xylem
 - (b) Anomalous secondary growth in *Bignonia*

D9—3300/1609

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