

2018

2nd Semester

BOTANY

PAPER—C4T

(Honours)

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

1. Answer any five of the following :

5×2

- (a) What is sulphur shower? Give example.
- (b) What is called heteromorphic alternation of generation? Give example.
- (c) Give the xerophytic features present in *Sphagnum*.
- (d) Write two major differences between woods of *Cycas* and *Pinus*.

(Turn Over)

- (e) Compare between Apospory & Apogamy.
- (f) Give the angiospermic features of *Gnetum* & the fern features of *Cycas* leaf.
- (g) Define synangium & Retort cell with example.
- (h) Name two floating heterosporous pteridophytes.

2. Answer any four of the following : 4×5

- (a) Discuss the anatomical features of the needle of *Pinus*. 5
- (b) Give the differential features of the capsule of *Funaria* & *Anthoceros*. 5
- (c) Give illustrated account of the embryogeny of *Pinus*. 5
- (d) Define heterospory. Explain its significance in the life history of *Selaginella*. 2+3
- (e) Compare between the sperophyte of *Pellia* & *Porella*. 5
- (f) Describe the characteristic features of *Cooksonia*. 5

3. Answer any *one* of the following :

1×10

(a) Write about the economic importances of gymnosperms. Briefly discuss about the ecological importances of bryophytes.

6+4

(b) What is Telome ? Explain with suitable diagrams the evolution of megaphyllous leaves of ferns in the light of telome concept.

2+8