

2022

(CBCS)

(1st Semester)

BOTANY

Paper Code : BGE-01

[Biodiversity (Microbes, Algae, Fungi and Archegoniate)]

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

(PART : B—DESCRIPTIVE)

(Marks : 50)

The figures in the margin indicate full marks for the questions

Answer **one** question each from any **five** Units

UNIT—1

1. (a) Write a note on general structure and replication of virus with suitable diagram. 10

Or

- (b) Write short notes on : 5×2=10
(i) RNA virus
(ii) General characteristics of bacteria

(2)

UNIT—2

2. (a) Write an account on morphology and life cycle of *nostoc*. 10

Or

- (b) Write notes on : 5×2=10

(i) Chlamydomonas reproduction methods

(ii) Economic importance of algae

UNIT—3

3. (a) Discuss the classification of fungi. 10

Or

- (b) Write notes on : 5×2=10

(i) Endomycorrhiza and ectomycorrhiza

(ii) General account of lichens

UNIT—4

4. (a) Discuss the unifying features of archegoniate. 10

Or

- (b) What is alternation of generation? Describe the alternation of generation in archegoniate. 10

L23/200a

(Continued)

(3)

UNIT—5

5. (a) Write a note on the economic importance of bryophytes with special reference to sphagnum. 10

Or

- (b) Write short notes on : 5×2=10

(i) Adaptation of bryophytes to land habit

(ii) Reproduction of *Marchantia*

UNIT—6

6. (a) Write an account on morphology and reproduction of *Equisetum*. 10

Or

- (b) Write notes on : 5×2=10

(i) Heterospory and Seed habit

(ii) Stellar evolution in pteridophytes

UNIT—7

7. (a) Give a general account of gymnosperms with suitable examples. 10

L23/200a

(Turn Over)

(4)

Or

(b) Write notes on : $5 \times 2 = 10$

(i) Ecological and economic importance of gymnosperms

(ii) Anatomy of Cycas leaf
