

TDC Odd Semester Exam., 2020
held in July, 2021

BOTANY
 (Honours)

(1st Semester)

Course No. : BOTH-103

[**Evolution, Diversity of Phanerogams**
(Gymnosperms) and Biostatistics]

Full Marks : 35
Pass Marks : 12

Time : 2 hours

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

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. (a) What do you mean by inheritance of acquired characters? 1
 (b) Write in detail the Darwin's theory of natural selection. 6

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(Turn Over)

2. (a) What is geological timescale? 1
 (b) Describe the synthetic theory of evolution. 6

UNIT—II

3. (a) Give a short account of classification of gymnosperms. 4
 (b) Write a short note on distribution of gymnosperms in India. 3
 4. (a) Write down the pteridophytic characters of gymnosperms. 2
 (b) Give a general account of Indian Bennettitales. 5

UNIT—III

5. (a) Why is Ginkgo called a living fossil? 2
 (b) Why is Gnetum regarded as highly evolved among gymnosperms? Write a note on male cone of Gnetum. 2+3=5
 6. (a) Name one gymnosperm found in Assam. 1
 (b) With labelled sketches, describe the development of male and female gametophyte in Pinus. 6

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(Continued)

UNIT—IV

7. (a) What do you mean by central tendency? 1
(b) Describe different methods of measurement of central tendency. 6
8. (a) Write a note on standard deviation. 3
(b) Describe statistical methods of data collection and its application. 4

UNIT—V

9. Write notes on the following : $3\frac{1}{2}+3\frac{1}{2}=7$
(a) Binomial distribution
(b) Normal distribution
10. (a) Give a short account of standard error. 3
(b) Describe chi-squared test in detail with suitable example. 4

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