2024/SEM/EVEN/09/26/LISB-651(B)/175

PG Even Semester Exam, 2024

Life Science & Bioinformatics

4th Semester

COURSE NO. LS-651 (B)

[Phaneroganic Botany]

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer all questions,

1. Write notes on : 5+5+4=14
   a. Modification of calyx
   b. Placentation in angiosperms
   c. Biochidromous venation

Or

2. Write the difference between: $3^1/_2$x4=14
   a. Raceme and spike
   b. Helioid and scorpiod cyme
   c. Corymb and umbel
   d. Spadix and mixed spadix

Turn over

3. What is anomalous secondary growth? What are its types and causes? Discuss the anomalous secondary growth in dicots. 2+5+7=14

Or

4. Write notes on: 7x2=14
   a. Root-stem transition
   b. Origin of siphonostele

5. Differentiate between the process of microgametogenesis from megagametogenesis. 14

Or

6. Write notes on : 7x2=14

   a. Somatic embryogenesis

   b. Polyembryony and its significance

7. Define with examples: 5+4+5=14

   a. Syntype and lectotype

   b. Valid publication of a name

   c. Autonym and tautonym

Or

8. Write the role of DNA markers in angiosperm taxonomy. 14

9. a. Write the role of botanic gardens in teaching and research. 7

   b. Advanced characteristics of Orchidaceae. 7

Or

10. What is phylogenetic tree? How do phylogenetic trees help in understanding evolution? How are evolutionary relationships determined in cladistic analyser? 2+4+8=14

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