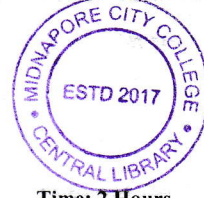


PG CBCS
M.Sc. Semester-I Examination, 2022
BOTANY
PAPER: BOT 104



Full Marks: 40

Time: 2 Hours

Write the answer for each unit in separate sheet

The figures in the right-hand margin indicate full marks.
 Candidates are required to give their answers in their own words as far as practicable.

UNIT: I

BOT 104.1: PTERIDOPHYTES

Marks: 20

GROUP-A

1. Answer any TWO questions of the following: 2×2=4

- a) Define annulus and stomium.
- b) Distinguish between leptosporangiate and eusporangiate sori.
- c) Mention two important genera of Zosterophyllopsida.
- d) Mention two adaptive characteristics of pteridophytes for early land plant habit.

GROUP-B

2. Answer any TWO questions of the following: 4×2=8

- a) Apospory in fern
- b) Progymnosperm
- c) Telome theory
- d) Stelar evolution in pteridophytes

GROUP-C

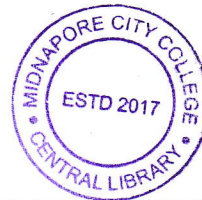
3. Answer any ONE question of the following: 8×1=8

- a) Characterize Zosterophyllopsida. How does the group differ from Rhyniopsida? Why the group is regarded as the progenitor of Lycopside? 3+2+3
- b) Characterize Lycopside. Write a short note on soral evolution of pteridophytes. 3+5

P.T.O.

(2)

UNIT: II
BOT 104.2 - GYMNOSPERMS
Marks: 20



GROUP-A

- 1. Answer any TWO questions of the following:** **2×2=4**
- a) What is pre-pollen?
 - b) What is pollination drop?
 - c) Name any one extinct member of Cycadales with its geological distribution.
 - d) Name two drug obtained from Gymnosperms. Write their source plants.

GROUP-B

- 2. Answer any TWO questions of the following:** **4×2=8**
- a) Describe different fossil genera of Pentaxylon plant.
 - b) Write about the distribution pattern of modern conifers in India.
 - c) Write about the origin of true ovule.
 - d) Write down the geographical distribution of extant cycads.

GROUP-C

- 3. Answer any ONE question of the following:** **8×1=8**
- a) State the angiospermic characteristics of Gnetum. State about economic importance of Gymnosperms with special reference to essential oil and wood. **3+2+3**
 - b) Write about the origin of seed-cone complex among Conifers.
