

Second Semester Examination-2018

M.Sc. BOTANY

Paper Code: BOT-202

Palaeobotany and Palynology & Plant Reproductive Biology

Full Marks : 40

Time: 2 Hours

Write the answer for each unit in separate Sheet

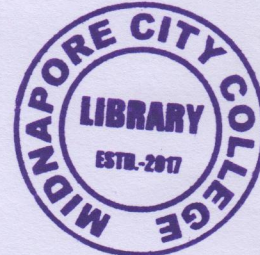
Unit -I

Palaeobotany

1. Answer any four questions from the following

1×4=4

- What is coal ball?
- Differentiate between micro and mega fossil.
- What do you mean by Gondwana Sequence?
- What is peel technique?
- What do you mean by Radio-metric dating?
- What is petrification?



2. Answer any two questions from the following

3×2=6

- Mention the mode of preservation of fossil as per schopf (1975).
- Use of fossil plants in deciphering ecological history.
- Define "fossilization". Write the role of different factor favouring it.

3. Answer any one question from the followings

10×1=10

- What is the relative and absolute dating? Write the potassium-argon dating method for fossil study. Write the ground their section technique for fossil study.
- Classify the Indian Gondwana sequence. Write the different mega- floristic assemblages in Gondwana sequence Mention the principles of stratigraphy.

2+5+3=10

4+4+2=10

(Turn Over)

Unit – II

Palynology & Plant Reproductive Biology

1. Answer any four questions from the following: 1×4=4
- a) What is Sporopollenin?
 - b) Define euro and stenopallynous with example.
 - c) Name one family having monoporate pollen grains.
 - d) Write the function of pollen kit.
 - e) What is NPC system? Who first introduced it?
2. Answer any two questions from the following: 3×2=6
- a) Sculptures of Sporoderm
 - b) Application of Palynology in Taxonomic study.
 - c) Write the short note on LO- analysis.
3. Answer any one question from the followings 10×1=10
- a) What do you mean by aeropalynology? Write the mechanism of type I hypersensitivity caused by pollen. Write the significance of forensic Palynology. 2+3+5=10
 - b) What is Ubisch body? Write the NPC system of classification of pollen spore. What is self-compatibility mechanism between Pollen pistil interaction? 2+5+3=10
