

SH-II/Botany/202/C-4/19

B.Sc. 2nd Semester (Honours) Examination, 2019

BOTANY

[Archegoniate (Bryophyta, Pteridophyta & Gymnosperms and Palaeobotany)]

Paper : 202/C4

Course ID : 21312

Time: 1 Hour 15 Minutes

Full Marks: 25

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

1. Answer *any five* questions from the following: 1×5=5
 - (a) What is perichaetium?
 - (b) What is incipient heterospory?
 - (c) What is coralloid roots? Where is it found?
 - (d) What is vallecular canal? Where is vallecular canal found?
 - (e) What is taxol?
 - (f) Define index fossil.
 - (g) Distinguish between elaters and elaterophores.
 - (h) In which period does the first fossil record of vascular plants appear?

 2. Answer *any two* questions from the following: 5×2=10
 - (a) What is incubous arrangement of leaves? Describe the gametophytic phase of *Porella* (vegetative only) with suitable diagram. 5
 - (b) Mention two xerophytis characters of *Pinus*. Draw and describe the anatomical structure of *Pinus* needle leaf. 2+3=5
 - (c) Write the advanced characters of *Gnetum*. Name two Indian species of *Gnetum*. 4+1=5
 - (d) Classify the Mesozoic era into periods and mention the megafloral succession through the time. 2+3=5

 3. Answer *any one* question from the following: 10×1=10
 - (a) Describe the sporophytic structure of *Anthoceros* with suitable diagram. Mention the advanced characters of its sporophyte. 7+3=10
 - (b) Describe the stem anatomy of *Equisetum* with suitable diagrams. Comment on the morphological nature of sporangiophore of *Equisetum*. 7+3=10
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