

**U.G. 2nd Semester Examination - 2021****BOTANY****[HONOURS]****Course Code : BBOTCCHC202****Course Title : Archegoniate and Paleobotany**

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.**Provide neat diagrams wherever necessary.*

1. Answer any **ten** of the following questions:  
1×10=10
- What is heteromorphic alternation of generation?
  - What do you mean by acrogynous Jungermanniales?
  - What do you mean by stegocarpic moss?
  - Give two fern characters of *Psilotum*.
  - Mention the morphological nature of trabeculae in *Selaginella*.

- What are carinal canals?
- Name two Pteridophytic taxa used as food.
- Define index fossil.
- What is perigynium?
- Define manoxylic wood.
- What is ovuliferous scale?
- Name a drug-yielding Gymnosperm.
- Which period is called the age of ferns?
- Which type of rock is best suited for preservation of fossils?
- What are coal balls?

2. Answer any **five** questions: 2×5=10
- What is calyptra? Mention its ploidy level.
  - What is epicranoid type peristome tooth? Give an example.
  - Why *Rhynia major* was renamed as *Aglaophyton major*?
  - State the morphological nature of the synangium of *Psilotum*.
  - What is transfusion tissue? Mention its functions.

- f) What is cleavage polyembryony? In which gymnosperm does it occur?
- g) Mention the periods of the Palaeozoic era in an ascending order.
- h) Distinguish impression and compression.
3. Answer any **two** questions :  $5 \times 2 = 10$
- a) Write a short note on progressive sterilization of the sporophyte in Bryophytes. 5
- b) Briefly describe the elementary process of the telome concept with suitable diagrams. 5
- c) What is incipient heterospory? How heterospory is connected with the origin of seed habit. 2+3
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