

Bankura University
B.Sc 2nd Semester (Honours) Examination,2021
Sub : Botany

Course ID: 21312

Course Code: SHBOT/202/C-4

Course Title: Archegoniate (Bryophyta, Pteridophyta, & Gymnosperm) and Palaeobotany

Full Marks: 25

Time: 1 hr 25 mins.

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

1. Answer *any five* of the following questions: (1x5= 5)

- a) Mention the periods of the Palaeozoic era in an ascending order.
- b) Name a pteridophyte used in agriculture and why?
- c) Name a drug-yielding taxon of gymnosperms
- d) What are carinal canals ?
- e) What is calyptra?
- f) Mention the functional difference between amphithecium and endothecium.
- g) Write the fern characters of *Cycas*
- h) Which type of rock is best suited for preservation of fossils.

UNIT II

2. Answer *any two* of the following questions: (5x2=10)

- a) Write a short note on synangium of *Psilotum*.
- b) Write a short note on applications of fossil study in Botany.
- c) Write short note on progressive sterilization of the sporophyte in bryophytes.
- d) Describe the anatomical structure of the leaf of *Pinus*.
- e) Write a brief note on the algal origin of bryophytes.

UNIT III

3. Answer *any one* of the following questions: (10x1= 10)

- a) Describe the elementary process of the telome concept. Explain with this concept the origin of reproductive structures in Psilopsida and Sphenopsida. (4+6)
- b) Draw and describe the male fructifications of *Cycas* and *Gnetum* (5+5)