## UG/2nd Sem/H/20 (CBCS)

## 2020

## **BOTANY (Honours)**

## Paper: BOTH - DC-3 [CBCS]

Full Marks: 25 Time: Two Hours

The figures in the margin indicate full marks.

- 1. Answer any *five* questions of the following :  $1 \times 5 = 5$ 
  - (i) Mention the water absorbing cells in the plant body of Sphagnum.
  - (ii) What is pseudoelater?
  - (iii) What type of fossils are known as indicator fossils?
  - (iv) Which era is known as 'Age of Conifers'?
  - (v) Mention the geological age of Rhynia.
  - (vi) What is apospory?
  - (vii) Which plant known as 'sago palm'?
  - (viii) State one angiospermic character of the ovule of Gnetum.
- 2. Answer any *four* questions of the following:

 $3 \times 4 = 12$ 

- (i) Discuss the role of bryophytes in plant succession and pollution monitoring.  $1\frac{1}{2}+1\frac{1}{2}=3$
- (ii) What is synangium? Comment on gametophyte of *Psilotum*. 1+2=3
- (iii) Compare the leaf anatomy of *Cycas* and *Pinus*.
- (iv) Describe the female gametophyte of *Gnetum*.

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- (v) Mention the different eras, periods and epochs in the standard geological time scale.
- (vi) Why 'Gondwanaland' is so-named? How was it formed? 1+2=3
- 3. Answer any *one* question of the following :

 $8 \times 1 = 8$ 

- (i) Classify Bryophyta following Proskaur's (1957) scheme upto class and mention the diagnostic properties of each class.
- (ii) What is heterospory? Explain fossil and developmental evidences of heterospory. How much *Selaginella* show seed habit. 1+3+4=8

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