

B.Sc. 1st Semester (Honours) Examination, 2022 (CBCS)

Subject : Botany

Course : CC-II

Archegoniate

Time : 2 Hours

Full Marks : 40

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

1. Answer *any five* of the following questions: 2×5=10
- (a) What is peristome teeth? State its function. 1+1
- (b) Name one aquatic and one terrestrial species of *Riccia*. 1+1
- (c) What is incipient heterospory? Give example. 1+1
- (d) What is amphiphloic siphonostele? Name one Pteridophyte where amphiphloic siphonostele is found. 1+1
- (e) Differentiate between eusporangiate and leptosporangiate ferns. 2
- (f) Name one Gymnosperm where archegonia is not developed. Name one climber sp. of Gymnosperm. 1+1
- (g) Write the fern characters of *Cycas*. 2
- (h) Differentiate between apogamy and apospory. 2
2. Answer *any two* of the following questions: 5×2=10
- (a) Draw and describe the internal structure of *Marchantia* sporogonium. 2+3
- (b) Write a short note on morphological nature of the *Selaginella* rhizophore.
- (c) Draw and describe the internal structure of *Pinus* niddle.
- (d) Write a short note on the Economic importance of Gymnosperms.
3. Answer *any two* of the following questions: 10×2=20
- (a) Draw and describe the different kinds of stele found in the genus *Lycopodium* with examples. 5+5
- (b) Draw and describe the internal structure of the *Anthoceros* sporophyte. Why *Anthoceros* is placed under a synthetic group? 6+4
- (c) Write the angiospermic characters of *Gnetum*. Draw and describe the male and female fructifications of *Gnetum*. 4+6
- (d) Name one pteridophyte where elater is found. Draw and describe the L.S. of strobilus of that pteridophyte. 2+3+5