

3 (Sem-1) BOT M 2

Bijni College Library  
P.O. Bijni, Dist. Chirang  
(E.T.A.D) Assam

2016

BOTANY

( Major )

Paper : 1.2

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

1. Choose the correct answer : 1×7=7
- (a) Elaters in bryophytes help in
- (i) assimilation of  $\text{CO}_2$
  - (ii) dispersal of spores
  - (iii) vegetative reproduction
  - (iv) sexual reproduction
- (b) Which of the following steles is considered to be the most primitive?
- (i) Haplostele
  - (ii) Plectosteles
  - (iii) Solenosteles
  - (iv) Dictyosteles

वृद्धि के लिए

(c) Presence of peltate sporangium is a characteristic feature of

- (i) Lycopsidea
- (ii) Pteropsida
- (iii) Sphenopsida
- (iv) Psilopsida

(d) Elongated sporogonium is a characteristic of

- (i) *Riccia*
- (ii) *Marchantia*
- (iii) *Sphagnum*
- (iv) *Anthoceros*

(e) Which of the following bryophytes shows *Nostoc* colonies in the thallus?

- (i) *Riccia*
- (ii) *Marchantia*
- (iii) *Sphagnum*
- (iv) *Anthoceros*

(f) *Sphagnum* is commonly known as

- (i) reindeer moss
- (ii) cow moss
- (iii) common moss
- (iv) peat moss

(g) Which of the following structures does not occur in *Selaginella*?

- (i) Ligule
- (ii) Ramenta
- (iii) Trabecula
- (iv) Rhizophore

2. Distinguish between the following :  $2 \times 4 = 8$

- (a) Eusporangiate and Leptosporangiate types of development of sporangia
- (b) Prothallus and Protocorm
- (c) Haplostele and Mixed protosteles
- (d) Homospory and Heterospory

3. Write short notes on any three of the following :  $5 \times 3 = 15$

- (a) Heterospory and seed habit
- (b) Sporocarp of *Marsilea*
- (c) Water absorption and retention mechanism in *Sphagnum*
- (d) Economic importance of Bryophyta
- (e) Rhizophore of *Selaginella*

4. Answer the following questions :  $10 \times 3 = 30$

- (a) Give an account of the morphology and reproduction of *Psilotum nudum*. 10

Or

Discuss the telome theory of evolution of sporophyte.

- (b) What is meant by alternation of generation? Explain with reference to the life history of *Polytrichum*.  $2+8=10$

Or

Give a comparative account on the sporophytes of *Riccia*, *Marchantia* and *Anthoceros*. 10

- (c) Give a general account on various methods of spore dispersal in bryophytes. 10

Or

Compare and contrast among the spore-bearing organs of *Lycopodium*, *Selaginella* and *Equisetum* with labelled diagrams.

\*\*\*

3 (Sem-1) ENG (SC)

Bijni College Library  
P.O. Bijni, Dist. Chirang  
(B.T.A.D) Assam

2016

ENGLISH (Science)

( Functional English—I )

Full Marks : 40

Time : 2 hours

*The figures in the margin indicate full marks  
for the questions*

1. Form adjectives from the nouns and verbs  
given below (any seven) : 1×7=7
- (a) apology
  - (b) coward
  - (c) mountain
  - (d) society
  - (e) appal
  - (f) contradict
  - (g) destroy
  - (h) provoke