

B.Sc. Semester - 3 (CBCS) Examination
Oct/Nov - 2024 [As Per Syllabus Year June-2019]
Botany-B301(Core)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1(A) Answer in very short: (04)
- (1) Which is the main xanthophyll pigment of Phaeophyceae?
 - (2) What do you mean by Coenobium form?
 - (3) Swimming pools are frequently treated with?
 - (4) Name reserved food material of *Batrachospermum*?
- Que.1(B) Answer in brief (any one): (03)
- (1) Write on Akinetes and endospore in fallen stars with diagram.
 - (2) Describe Cell wall of algal cell
- Que.1(C) Answer in detail (any one): (07)
- (1) Explain with diagram sex organs and fertilization in frog spawn algae.
 - (2) Describe dendroid and rhizopodial forms of thallus structure in algae.
- Que.2(A) Answer in very short: (04)
- (1) Give the scientific name of yeast.
 - (2) Fill in the blanks: Empty isthmus in *Aspergillus* is called.....
 - (3) True or False? Phialospores of *Aspergillus* are arranged in basipetal succession.
 - (4) Give the name of any two-disease caused by *Eurotium*.
- Que.2(B) Answer in brief (any one): (03)
- (1) Explain: Industrial application of *Aspergillus* in food industries.
 - (2) Describe the septal pore in fungal cell.
- Que.2(C) Answer in detail (any one): (07)
- (1) Describe asexual reproduction in *Eurotium*.
 - (2) Discuss vegetative reproduction in yeast cell.
- Que.3(A) Answer in very short (04)
- (1) What is Innovations in bryophytes?
 - (2) How many thallus produced by germination of Gammae in *Marchantia*?
 - (3) What is Autoicous?
 - (4) How many peristome teeth are present in *Funaria*?
- Que.3(B) Answer in brief (any one): (03)
- (1) Explain: Dehiscence of capsule in *Funaria*.
 - (2) Discuss medicinal uses of Bryophytes.

- Que.3(C) Answer in detail (any one): (07)
- (1) Describe antheridial branch of *Funaria* with diagram.
 - (2) Describe post fertilization changes in archigoniophore of *Marchantia*.
- Que.4(A) Answer in very short: (04)
- (1) Give one word: Plant curl and ball like during dry season and become green and fresh when moisture is available.
 - (2) Fill in the blank: The development of sporangia in *Adiantum* is.....
 - (3) Which stage is considered an advance stage of heterospory?
 - (4) Define: Ligule
- Que.4(B) Answer in brief (any one): (03)
- (1) Explain the Protostele and Dictyostele
 - (2) Explain mature sporangia of *maiden hair fern*
- Que.4(C) Answer in detail (any one): (07)
- (1) Discuss internal structure of strobilus in *Selaginella*
 - (2) Describe merits of telome theory.
- Que.5(A) Answer in very short (any three): (04)
- (1) Why *Pinus* is pyramidal shape?
 - (2) True or False: cremocarp fruit, umbel inflorescence in Fabaceae.
 - (3) Name the genus having clistogamous flower.
 - (4) Name the family of *Baheda* tree.
- Que.5(B) Answer in brief (any one): (03)
- (1) Describe the structure of female cone of *Pinus*.
 - (2) Refer the genus to respective family giving reasons: *Apium*
- Que.5(C) Answer in detail (any one): (07)
- (1) Write floral character and floral formula of *Combretaceae* family.
 - (2) Describe internal structure of *Pinus* needle with diagram.
