

B.Sc. Semester - 3 (CBCS) Examination
Oct/Nov - 2024 (As Per Syllabus Year June-2017)
BOTANY(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(any three) : (03)
- (1) What is mastigonemes in Algal flagella?
 - (2) What is colony in algae?
 - (3) Nostoc is prokaryotic or Eukaryotic?
 - (4) Swimming pools are frequently treated with?
 - (5) State the type of life cycle in Batrachospermum?
- Que.1(B) Answer in brief (any one): (04)
- (1) Write vegetative structure in fallen stars with diagram
 - (2) Describe Flagella 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 filamentous forms of thallus structure in algae.
- Que.2(A) Answer in very short (any three): (03)
- (1) What is septal swelling?
 - (2) Who give the name lomasome?
 - (3) Fill in the blanks: In *Aspergillus* vesicle forms many radially arranged tubular outgrowth called.....
 - (4) True or False? Male branch of *Aspergillus* is called pollinodium.
 - (5) Which two enzymes secreted by yeast for nutrition?
- Que.2(B) Answer in brief (any one): (04)
- (1) Explain: Industrial application of yeast in brewing industries.
 - (2) Describe diplobiontic life cycle in yeast
- Que.2(C) Answer in detail (any one): (07)
- (1) Describe asexual reproduction in *Eurotium*.
 - (2) Discuss Crozier formation in *Aspergillus*.
- Que.3(A) Answer in very short (any three): (03)
- (1) Where are the archegonia situated in *Marchantia*?
 - (2) Name the spore producing part of the sporogonium.
 - (3) True or False? *Marchchandia* is a dioecious plant.
 - (4) Which bryophytes are used for lamp wicks?
 - (5) What is cladia in bryophytes?
- Que.3(B) Answer in brief (any one): (04)
- (1) Discuss protonema as a structure of reproduction
 - (2) Discuss Apophysis of funaria capsule.
- Que.3(C) Answer in detail (any one): (07)
- (1) Describe archegonial branch of *Marchantia* with diagram.
 - (2) Describe with diagram: Mature sex organs in *Funaria*.

- Que.4(A) Answer in very short (any three): (03)
- (1) Give one word: In telome, the leaves become reduced to scaly or needle like shape.
 - (2) Name epiphytic species of small club moss plant?
 - (3) What is venation in *Adiantum* of the leaflet?
 - (4) What is heterospory?
 - (5) What is Haplostele?
- Que.4(B) Answer in brief (any one): (04)
- (1) Explain Actinostele and its types.
 - (2) Explain Sex organs of *Adiantum*.
- Que.4(C) Answer in detail (any one): (07)
- (1) Discuss internal structure of *Selaginella stem*.
 - (2) Describe in detail merits of telome theory.
- Que.5(A) Answer in very short (any three): (03)
- (1) State the types of fruit in *Clitoria*?
 - (2) True or False: Fertilization is siphonogamous in pinus.
 - (3) Name a dicot family having Umbel inflorescence.
 - (4) Name the family having jaculators.
 - (5) Give scientific name of *Dandalio Thor*?
- Que.5(B) Answer in brief (any one): (04)
- (1) Describe the structure of Female cone of *Pinus*.
 - (2) Refer the genus to respective family giving reasons: *Crinum*
- Que.5(C) Answer in detail (any one): (07)
- (1) Write floral character and floral formula of *Commelinaceae* family.
 - (2) Describe internal structure of *Pinus* Ovule with diagram.
