



DCU-003-0011004

Seat No. _____

B. Sc. (Sem. I) (CBCS) Examination

August - 2022

Botany-101 : Plant Diversity

(Old Course)

Faculty Code : 003

Subject Code : 0011004

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

Instruction : Attempt any five questions.

- 1 (a) Objective : 4
- (1) Write the name of four major division of algae.
- (2) The reserve food material in Chlorophyceae is _____
- (3) _____ is known as pond silk.
- (4) Air bladder occurs in _____
- (b) Answer in brief : 2
- Write 4 characters of kingdom protista.
- (c) Answer in detail : 3
- Explain scalariform conjugation in Spirogyra algae.
- (d) Write a note on : 5
- Describe the life cycle of Spirogyra.
- 2 (a) Objective : 4
- (1) The life cycle of Sargassum is _____
- (2) Spirogyra possess _____ shaped chloroplast.
- (3) Arrange the following term in correct order of taxonomic categories.
Genus, Family, Division, Order, class & Species.
- (4) In which kingdom, multicellular decomposer is present.
- (b) Answer in brief : 2
- Draw only chart showing life cycle of Sargassum
- (c) Answer in detail : 3
- Write general characters of kingdom plantae.
- (d) Write a note on : 5
- Explain reproduction in Sargassum

3	(a) Objective :	4
	(1) What is mycology?	
	(2) Give name a fungal disease caused by Mucor in animal and human.	
	(3) Yeast cells are the best source of _____ vitamin.	
	(4) Agaricus belong to _____ class.	
	(b) Answer in brief :	2
	Write vegetative structure of Mucor	
	(c) Answer in detail :	3
	Describe sexual reproduction in Mucor	
	(d) Write a note on :	5
	Give an account of the economic importance of fungi.	
4	(a) Objective :	4
	(1) Fruiting body of Agaricus is called _____	
	(2) Name a species of fungus which is source of antibiotic.	
	(3) Mucor is also known as _____ due to presence of black spore.	
	(4) Saccharomyces cerevisiae is the source of enzyme Invertase & Zymase. TRUE / FALSE	
	(b) Answer in brief :	2
	Write uses of fungi in antibiotics.	
	(c) Answer in detail :	3
	Give an account of general characters of fungi.	
	(d) Write a note on :	5
	Explain reproduction in Agaricus	
5	(a) Objective :	4
	(1) Which type of branching is found in Riccia?	
	(2) Which types of rhizoids are found in to the Riccia thallus?	
	(3) The _____ phase is the major & independent phase in the life cycle of Riccia.	
	(4) The scientist who deals with the Bryophyta is known as _____	
	(b) Answer in brief :	2
	Vegetative reproduction by tubers in Riccia	
	(c) Answer in detail :	3
	Give the general characters of class Bryopsida.	
	(d) Write a note on :	5
	Describe the anatomy of Raccia thallus with draw.	

- 6 (a) Objective : 4
- (1) The cell of Riccia thallus is consist of _____ chloroplast.
 - (2) The Riccia ventral consist of _____ & _____ cell.
 - (3) Life cycle of Riccia is _____
 - (4) Scales of Bryophyta are hyline or violet in colour
True / false
- (b) Answer in brief : 2
Give four general characters of Bryophyta.
- (c) Answer in detail : 3
Explain Riccia thallus with labeled diagram.
- (d) Write a note on : 5
Give general characters of Bryophayta.
- 7 (a) Objective : 4
- (1) Which type of root found in Nephrolepis plant?
 - (2) What is ramenta?
 - (3) Nephrolepis leaves length is _____
 - (4) Non flowering plants are _____
- (b) Answer in brief : 2
Which type of stele is found in Nephrolepis plant,
- (c) Answer in detail : 3
Explain the internal structure of Nephrolepis rhizome.
- (d) Write a note on : 5
Describe the life cycle of Nephrolepis
- 8 (a) Objective : 4
- (1) Seed less vascular plants are _____
 - (2) Gametophyte of Nephrolepis is otherwise known as _____
 - (3) A cluster of sporangia is known as _____
 - (4) Which type of prothallus, shape found in Nephrolepis?
- (b) Answer in brief : 2
Wnat is alternation of generation?
- (c) Answer in detail : 3
Explain the internal structure of Nephrolepis root (with Draw)
- (d) Write a note on : 5
With the help of Labelled diagrams explain the development of male and female gametophytes in Nephrolepis.

- 9** (a) Objective : **4**
(1) Give the common name of *Cycus revoluta*
(2) Which algae present in *Cycus* root?
(3) Vegetative reproduction in *Cycus* occurs by _____
(4) *Cycus* trunk is covered with _____ & _____
- (b) Answer in brief : **2**
Write the morphological characters of *Cycus* plant.
- (c) Answer in detail : **3**
Describe the development of male gametophyte in *Cycus*.
- (d) Write a note on : **5**
Write on male and female cone of *Cycus*
- 10** (a) Objective : **4**
(1) Negatively geotropic roots are found in which gymnosperm you studied?
(2) What is corraloid root in *Cycus*?
(3) *Cycus* leaflets are in which shape?
(4) *Cycus* is a unisexual plant. True/False
- (b) Answer in brief : **2**
Explain class Gnetopsida.
- (c) Answer in detail : **3**
Described the structure of *Cycus* ovule.
- (d) Write a note on : **5**
Anatomical structure of *Cycus* leaflet (pinnae).
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