Enrollment No._____

NAVRACHANA UNIVERSITY
a UGC recognized University

School: School of Science
Program/s: BSc Chemistry
Year: 1st **Semester:** 1st
Examination: End Semester Examination
Examination year: December - 2022

Course Code: BO103 **Course Name:** **Evolutionary Biology And Plant Kingdom**
Date: 8/12/2022 **Total Marks:** 40
Time: 8:30 AM to 10:30 AM **Total Pages:** 2

Instructions:

- *Write each answer on a new page.*
- *Use of a calculator is permitted/not permitted*
- *Any other relevant instructions if any*

Q. No.	Details	Marks	COs*	BTL#
Q.1	**Match the following:**	**10**	CO1, CO2, CO3, CO4, CO5,	BT1, BT2, BT3

1. 8 meiotic spore	a) Gemma cup
2. Dolipore septum	b) Phaeophyta
3. Girdle-shaped chloroplast	c) Xanthophyta
4. Laminarin starch	d) Ascospore
5. Litmus paper	e) Ulothrix
6. Phrokaryote	f) Basidiomycota
7. Rhodophycean starch	g) Batrachospermum
8. Saucer-shaped fruiting body	h) Lichen
9. Stellate-shaped chloroplast	i) Cyanophyta
10. Yellow-green algae	j) Zygnema

Q.2	**Answer in one line**	**6**	CO1, CO2, CO3, CO4, CO5,	BT1, BT2, BT3

1. Why fossils are important to study evolution?
2. Why bryophytes are called amphibians of plant kingdom?
3. Define "Pyrenoids".
4. What does "ontogeny recapitulates phylogeny mean?
5. Write down the morphology of the virus.
6. What is darwin's soup?

Q.3	**Answer in short (Any 6)**	**12**	CO1, CO2, CO3, CO4, CO5,	BT1, BT2, BT3

1. Differentiate between gram-positive and gram-negative bacteria.

2. Draw any one life cycle of algae
3. Describe the shape of the algae citing one example for each shape
4. Name 5 spores produced by the fungi Basidiomycota.
5. Explain evolution using any 2 evidence.
6. What is Lamarck's theory of evolution?
7. Write down the reproduction cycle of the virus.

Q.4	**Answer in brief (Any Three)**	**12**	CO1, CO2, CO3, CO4, CO5,	BT1, BT2, BT3

1. Describe salient features of Pteridophytes.
2. Differentiate between 11 classes of algae.
3. Describe the similarity between algae and bryophyte.
4. Explain the synthetic theory of evolution.

**********End of Question Paper**********