## PART C — (5 × 8 ≈ 40 marks)

Answer ALL questions choosing either (a) or (b). Each answer should not exceed 600 words.

(a) Describe the sexual reproduction in volvox.

Or

- (b) Give an account on the life cycle patterns seen in Algae.
- (a) Explain the sexual reproduction in Chara.

Or

- (b) Write about the post fertilization changes takes place in Gracilaria.
- 18. (a) Describe the cultivation of Gracilaria.

Or

- (b) Explain the economic importance of algae.
- 19. (a) Describe the mass culture of Nostoc.

Or

- (b) Describe the mass culture of Spriculina.
- 20. (a) Explain sexual reproduction in marchantia.

Or

(b) Describe the sporophyte of marchantia.

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Code No.: 20526 E Sub. Code: CMBO 11

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023

First Semester

Botany - Core

## ALGAE AND BRYOPHYTES

(For those who joined in July 2021 onwards)

Time: Three hours

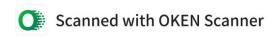
Maximum: 75 marks

PART A - (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer:

- 1. The classification of Algae was proposed by
  - (a) F.E. Fritsch
- (b) G.M. Smith
- (c) Linnaeus
- d) Bentham
- 2. Haplontic life cycle is found in
  - (a) Chara
- (b) Sargassum
- (c) Gracilaria
- d) Velvex



			Page 2	Code No. : 20526 E			
	(c)	Fungi	(d)	Bryophytes			
	(a)	Pteridophytes	(b)	Algae			
9.	These plants are called as amphibious plants						
	-	Spirulina		Chlorella			
	(a)	Ulva	(b)	Nostoc			
٠,	prot		_				
8.			ing is c	onsumed as single cell			
		Nostoc		Chara			
, .		Chlorella		Volvox			
7.	(b) 101p-101						
	, ,	Porphyra	(d)	Chlorella			
•		Ulva	(b)	Gelidium			
6.	The is	e most importai	no rou ar				
	(c)	Sargassum		gae used as human food			
		Nostoc	` '	Laminaria			
5.		ginic acid is obta	(b)				
	(c)	Volvox					
	(a)		(b) (d)				
4.	Cr	yptoblasts are s	een in	Sargassum			
	(c)	Globule	(d)	Archegoman			
	(a)		(b)	Nucure			
3.	Th	ne male sex orga	ın of Cha	ara is called as			
				. 11 . 1			

- The structure which helps in the dehiscence of capsule of marchantia is
  - Seta (a)

- Foot
- Gemmae
- Elaters (d)

PART B —  $(5 \times 5 = 25 \text{ marks})$ 

Answer ALL questions choosing either (a) or (b). Each answer should not exceed 250 words.

Classify the algae according to Fritsch.

Or

- (b) Explain the structure of volvox colony.
- Explain the external structure of chara 12. thallus with diagram.

Or

- Describe the internal structure of Sargassum stipe with suitable diagram.
- List out the uses of agar agar. 13.

Or

- of methods extraction the Explain Carrageenin.
- Explain the structure of nostoc. 14.

Or

- importance nutritive Describe the spirulina.
- Classify bryophytes according to Rothmaler. 15.

Or

Describe the transverse section of marchantia thallus with diagram.

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