18U2	V211 (Pages: 2)		
Reg. No SECOND SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2019			
(Regular/Improvement/Supplementary)			
	(CUCBCSS – U Botany - Complementa		
CC15U BOT2 C02 – CRYPTOGAMS, GYMNOSPERMS AND PLANT PATHOLOGY			
Time	(2015 Admission or : Three Hours	nwards) Maximum: 64 Marks	
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Draw diagrams only when specified.			
	Part A		
	Answer <i>all</i> questions. Each ques		
2.	2. Which type of sexual reproduction seen in <i>Spirogyra</i> ?		
3.	3. Name an Indian species of <i>Cycas</i> .		
4.	4. Name the reserve food material in Rhodophyceae.		
5.	The subunit of protein coat in viruses is		
6.	6. Aplanospores are walled asexual spores produced by algae.		
7.	7. Expand TMV.		
8.	8. Agar is obtained from red algae.		
9.	A resurrection plant is		
10.	O. Sphere shaped bacteria is called		
		$(10 \times 1 = 10 \text{ Marks})$	
Part B Answer any seven questions. Each question carries 2 marks.			
11	1. Give a brief account of <i>Cycas</i> coralloid root.	uestion carries 2 marks.	
	2. Differentiate between scales and rhizoids in R	iceia	
13. Draw a neat labeled diagram of a bacteriophage.			
14. Explain the classification of bacteria based on flagella.			
15.	5. List the symptoms of Blast of paddy.		
16. Explain the structure of a <i>Nostoc</i> filament.			

17. Write down the control measures of leaf mosaic of tapioca.

18. List the applications of bacteria in industry.

- 19. List any two characteristic features of Mastgomycotina.
- 20. Differentiate between autotrophic and heterotrophic mode of nutrition in bacteria.

 $(7 \times 2 = 14 \text{ Marks})$

Part C

Answer any six questions. Each question carries 4 marks.

- 21. Explain salient features of *Riccia* sporophyte.
- 22. Briefly describe the conjugation in bacteria.
- 23. Write a note on ecological significance of lichen.
- 24. Explain the structure of a single cell in *Spirogyra*.
- 25. Is virus living or nonliving? Substantiate.
- 26. Give an account on morphological features of *Usnea* thallus.
- 27. Explain the post fertilization changes in *Polysiphonia*.
- 28. Describe the morphological characters of *Cycas* megasporophyll.

 $(6 \times 4 = 24 \text{ Marks})$

Part D

Answer any two questions. Each question carries 16 marks.

- 29. With a schematic representation, describe the life history of Selaginella.
- 30. Explain in detail the life cycle of Sargassum.
- 31. With diagrams describe the different types of spores produced by *Puccinia*.

 $(2 \times 8 = 16 \text{ Marks})$
