D 73	73255 (Pages : 2)	Name
		Reg. No
FI	FIRST SEMESTER B.A./B.Sc. DEGREE EXA	MINATION, NOVEMBER 2019
	(CBCSS—UG)	
	Biotechnology	
	BTY 1B 01—CELL BIO	OLOGY
	(2019 Admissions	3)
Time		Maximum : 60 Marks
Time		
	Section A (Short Answer Typ	oe Questions)
	Answer any <b>ten</b> questi Each carries 2 mark	
1.	<ol> <li>Any four milestones in cell biology.</li> </ol>	
2.	2. What are Glyoxysomes?	
3.	3. Distinguish Apoptosis and Necrosis.	
4.	4. Adult stem cells.	
5.	5. What is metastasis?	
6.	6. Cdk inhibitors.	
7.	7. GABA.	
8.	8. ABC transporters.	
9.	9. Distinguish Heterochromatin and Euchromatin.	
10.	0. Define gap junctions and tight junctions.	
11.	11. Calmodulin.	
12.	2. What is RUBISCO?	
		$(10 \times 2 = 20 \text{ marks})$
	Section B (Paragraph Type	Questions)
	Answer any six out of s Each carries 5 mark	
13.	3. Explain chemo osmotic theory of ATP synthesis.	
14.	Describe the methods for transport of large molecules through plasma membrane.	
15.	5. Distinguish aerobic and anaerobic respiration.	

Turn over

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- 16. Explain what changes in cell cycle lead to cancer.
- 17. Write a brief account on cytoskeleton elements.
- 18. What is synaptonemal complex? Explain its significance in meiosis.
- 19. What are plastids? Describe different types of plastids.

 $(6 \times 5 = 30 \text{ marks})$ 

## Section C (Essay Type Questions)

Answer any one question.

It carries 10 marks.

- 20. Explain the structure and function of plasma membrane.
- 21. Describe cyclic and non cyclic photo phosphorylation.

 $(1 \times 10 = 10 \text{ marks})$