21U	U124S (Pages: 2) Name:	
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FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2021 (CUCBCSS-UG)		
CC15U PSY1 C01 - HUMAN PHYSIOLOGY		
	(Psychology - Core Course)	
	(2016 to 2018 Admissions – Supplementary/Improvement)	
Time:	e: Three hours Maxi	mum: 80 marks
	Part A	
	Answer all questions. Each question carries 1 mark.	
Choos	oose the correct answer:	
1.	1 is the structural and functional unit of an organism.	
	(Cell, Mitochondria, Lysosome, Tissue)	
2.	2. An example of monosaccharide.	
	(Lactose, Fructose, Maltose, Sucrose)	
3.	3. An enzyme that relaxes the DNA from its super-coiled nature.	
	(Gyrase, Helicase, Primase, Topoisomerase)	
4.	4. Triplet codon of alanine amino acid.	
	(GGU, GAU, GCA, GAA)	
5.	5 is a standardized arrangement of all chromosomes of a cell	
	(Diakinesis, Karyotyping, Interphase, Mitosis)	
Fill in	in the blanks:	
6.	6 is the characteristic type of cell division which keeps the ge	enetic continuity
	of an organism.	
7.	7is a pair of genes controlling the same character and located	d at the same
	locus in the homologous chromosomes?	
8.	8 is the sudden change of a gene or chromosome from one fo	rm to another.
9.	9 mutation prematurely signals the cells to stop building a pr	otein.
10	10 refers to the visible character of an organism.	
	_	< 1 = 10 Marks)
Part B		
	A narray all arrestions. Each arrestion comics 2 montes	

Answer *all* questions. Each question carries 2 marks.

- 11. Mitochondria.
- 12. Ribosome.

- 13. Purines.
- 14. Satellite DNA.
- 15. Meiosis.
- 16. Interphase.
- 17. Allele.
- 18. Phenotype.
- 19. Point mutation.
- 20. Down's syndrome.

 $(10 \times 2 = 20 \text{ Marks})$

Part C

(Answer in a paragraph of about half a page to one page) Answer any *six* questions. Each question carries 5 marks.

- 21. Fluid Mosaic Model of plasma membrane with suitable diagram.
- 22. Write a note on genetic code.
- 23. Mitotic division with suitable diagram.
- 24. Brief description of other patterns of inheritance Incomplete dominance and codominance with suitable diagram.
- 25. Klinefelter's syndrome.
- 26. Briefly explain carbohydrates.
- 27. Procedure of karyotyping.
- 28. Brief description of major types of tissues.

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

Part D (Essay type questions)

Answer any *two* questions. Each question carries 10 marks.

- 29. Write an essay on the structure of an animal cell.
- 30. Give an account on DNA replication.
- 31. Explain the Mendel's laws of inheritance.
- 32. Describe gene mutation and gene mutation disorders.

 $(2 \times 10 = 20 \text{ Marks})$
