18U619		(Pages: 2)	Name:
	SIXTH SEMESTER	B.Sc. DEGREE EXAMIN	
		(CUCBCSS-UG)	- ,
	· · ·	lar/Supplementary/Improve	
CC1	.5U ZO6 B14 - BIOTECH	INOLOGY, MICROBIOL (Zoology - Core Course)	OGY AND IMMUNOLOGY
		(2015 Admission onwards)	
Time:	Three Hours		Maximum: 80 Marks
A. An	swer <i>all</i> questions. Each qu	nestion carries 1 mark.	
1.	What is a single cell prote	ein?	
2.	Expand FISH.		
3.	What is a toxoid vaccine?	•	
4.	Mention any four normal	microflora of man.	
5.	Give any two important s	ymptoms of Graves Disease	) <b>.</b>
6.	Give any two uses of mor	noclonal antibodies.	
7.	What is YAC?		
8.	Name any two bacterial s	tains.	
9.	Give the functions of NK	cells.	
10	. What is lipofection?		
			$(10 \times 1 = 10 \text{ Marks})$
B. Ans	swer any <i>ten</i> questions. Eac	ch question carries 2 marks.	
11	. Give a brief note of myco	plasma.	
12	. What is inoculation?		
13	. What is a secondary cultu	re?	
14	. Differentiate between slo	t blot and dot blots.	
15	. Give a brief account of in	nmunotherapy.	
16	. What is epidemiology?		
17	. What is a hapten?		
18	. Give a short note of RFL	Ρ.	
19	. What is bioleaching?		
20	. Mention the differences b	etween viruses and viroids.	
21	. Give a short note on SLE		

22. Compare the functions of DNA ligase and DNA polymerase.

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

- C. Answer any *five* questions. Each question carries 6 marks.
  - 23. Describe various growth stages of bacteria.
  - 24. Give an account of immune mechanism in antitumour immunity.
  - 25. Briefly describe hybridoma technology.
  - 26. Describe the different types of vaccines.
  - 27. Give an account of Gram staining.
  - 28. Explain DNA finger printing.
  - 29. With a suitable diagram describe a bacteriophage.
  - 30. Give brief notes on Bt cotton and knock out mice.

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

- D. Write essays on any *two* of the following. Each question carries 10 marks.
  - 31. Give an account of transgenic animals. Describe any two transfection methods.
  - 32. Give an account of various cells which take part in immunity.
  - 33. Describe the various industrial products of microorganisms.
  - 34. Briefly describe the different types of antigen and antibody reactions.

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

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