



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 6th Semester Examination, 2022

MCBACOR13T-MICROBIOLOGY (CC13)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.*

Answer Question No. 1 and any *four* questions from the rest

1. Answer any *four* questions from the following: 2×4 = 8
 - (a) What do you mean by Schizont?
 - (b) What are Gnotobiotic animals?
 - (c) Mention the prophylactic measures of cholera.
 - (d) What is tetanospasmin?
 - (e) What is PBP?
 - (f) What is Zoonotic disease?
 - (g) What is Sandwich ELISA?
 - (h) What do you mean by invasiveness of pathogen?

2.
 - (a) How do microbes attach to and invade the host? 2
 - (b) What are the normal Microfloras associated with the following body sites? 2+2
 - (i) Oral cavity
 - (ii) Gastrointestinal tract
 - (c) Write briefly about the sample collection process from lower respiratory tract. 2

3.
 - (a) What are the predisposing factors of poliovirus infection? 3
 - (b) Make an outline sketch of pathogenesis of poliovirus. 3
 - (c) What do you mean by inapparent poliovirus infection? 2

4.
 - (a) What are the different antigens present in *Salmonella typhi*? 2
 - (b) Give a brief account on vaccines to control typhoid. 4
 - (c) How can an athlete's foot spread? 2

5. Describe the principles of each technique in disease diagnosis: 2×4 = 8
 - (a) Nested PCR
 - (b) Complement fixation
 - (c) Secondary immunofluorescence
 - (d) Hemagglutinin inhibition test.

6. (a) What are the tri-drugs used to control AIDS? 2
(b) Why HIV infection leads to immunodeficiency? 2
(c) What is the relation between MDR and antibiotic resistance? 2
(d) What is toxic Shock Syndrom? 2
7. (a) What are the four types of anthrax? Describe each in brief. 1+3
(b) What are the drugs used to treat peptic ulcer caused by *Helicobacter pylori*?
Narrate the mode of action of the drug for the treatment of the disease. 1+2
(c) What is EIEC? 1
8. (a) Describe the symptoms of Kala-azar. What is its causative agent? Which organ is affected by this disease? What is recrudescence? 2+2+1+2
(b) What is transport media? 1
9. (a) What do you mean by bacteriostatic and bacteriocidal antibiotics? Furnish with examples of each. 2+2
(b) Mention the aminoglycoside antibiotic and what is its target site of action. 1+1
(c) What do you mean by antibiogram? 2

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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