



**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 5th Semester Examination, 2020

**CC12-MICROBIOLOGY**

Full Marks: 40

**ASSIGNMENT**

*The questions are of equal value  
The figures in the margin indicate full marks.*

**Answer any *four* questions from the following**

10×4 = 40

1. Innate and adaptive immunity act in cooperative and interdependent ways to protect the host. Discuss the collaboration of these two forms of immunity. 10
2. Five types of cells are obtained at the end of cell fusion during Hybridoma technology. Name those cell types and explain how the desired hybridomas are selected from the cell mixture. Discuss about the applications of mAbs. 5+5
3. List the primary lymphoid organs and summarize their functions in the immune response. 10
4. Describe the process of T-cell maturation and thymic selection. 10
5. Explain the genetic events that lead to antibody diversity. 10
6. Identify and compare the distinguishing characteristics, mechanisms and major examples of type I and type IV hypersensitivities. 10

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