

SH-II/MCB/202/C-4/19

B.Sc. 2nd Semester (Honours) Examination, 2019**MICROBIOLOGY****(Virology)****Paper : SH/MCB/202/C-4****Course ID : 22212****Time: 1 Hour 15 Minutes****Full Marks: 25**

*The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable.
The questions are equal value.*

1. Answer *any five* questions from the following: 1×5=5
- (a) Mention the contribution of Martinus Beijerinck in the field of virology.
 - (b) Define proto-oncogenes.
 - (c) What is Eclipse phase?
 - (d) What do you mean by window period?
 - (e) What are virusoids?
 - (f) Name one single stranded and one double stranded RNA virus.
 - (g) What is PFU?
 - (h) What is pock test?
2. Answer *any two* questions from the following: 5×2=10
- (a) Discuss the general characteristics of interferon. Mention some functions of it. 3+2=5
 - (b) Write a short note on Viral vectors used in cloning of foreign genes. What is phage display? 3+2=5
 - (c) Write a short note on Different modes of viral transmission. 5
 - (d) Write short notes on the following: 2½+2½=5
 - (i) p⁵³ protein
 - (ii) Antiviral agents
3. Answer *any one* question from the following: 10×1=10
- (a) Diagrammatically describe the structure of a typical T-even bacteriophage. What are capsomeres? State the functions of viral matrix proteins. 6+2+2=10
 - (b) Give a brief outline on the structure, mode of transmission and replication of Hepatitis-B virus. What is viral budding? 2+2+4+2=10