



HE-033016

Seat No. 2665

B. Sc. (Sem. III) Examination

October - 2019

BSCOC - 305 (A) : Microbiology

(The Virology & Mycology)

(New Course)

Time : 3 Hours]

[Total Marks : 70

- Instructions :** (1) All questions carry equal marks.
(2) Draw a neat and labeled diagram when required.
(3) Write the question numbers clearly.

- 1 Write Any **Two** of the following : 14
- (a) Describe the structural diversity of virus.
 - (b) Describe the methods used for cultivation of plant virus.
 - (c) Describe the method of enumeration of bacteriophage.
 - (d) Describe the criteria used for classification of virus.
- 2 Answer Any **Two** of the following : 14
- (a) Describe the process of reproduction of virulent phage.
 - (b) Describe the structure of HIV.
 - (c) Describe the importance of virus by taking examples.
 - (d) Describe the role of 'Cro' gene in replication of lambda phage.
- 3 Write On Any **Two** of the following : 14
- (a) Describe the modifications of fungal hyphae.
 - (b) Describe the methods used for preservation of fungi.
 - (c) Describe the various stages of sexual reproduction in fungi.
 - (d) Discuss diseases caused by fungi.

- 4 Write On Any **Two** of the following : 14
- (a) Write a note on 'chytids'.
 - (b) What are the criteria for classification of fungi.
 - (c) Discuss the life cycle of Rhizopus.
 - (d) Describe the method of sexual reproduction of yeast.
- 5 Write In One or Two Sentences on the following : 14
- (i) Capsomers
 - (ii) Stanley
 - (iii) Importance of one step growth curve.
 - (iv) Who gave the term 'virus'.
 - (v) Give the importance of lysogeny.
 - (vi) Name of virus used in genetic engineering.
 - (vii) What is haemagglutination?
 - (viii) Define 'thallus'.
 - (ix) What is the importance of parasexual cycle ?
 - (x) Which mycotoxin is produced by Aspergillus ?
 - (xi) What is the method of reproduction is deuteromycetes ?
 - (xii) Which fungi is important in formation of mycorrhizza ?
 - (xiii) Which microbes produces cellulase?
 - (xiv) How can a media be made selective for cultivation of mold?