

Seat No. : _____

MN-142

March-2019

B.Sc., Sem.-VI

**CC-308 : Microbiology
(Virology and Mycology)**

Time : 2:30 Hours]

[Max. Marks : 70

- Instructions :** (1) All questions are compulsory and carries equal marks.
(2) Mention correct question number against the answer.

1. (A) Explain *invitro* culture techniques for the cultivation of viruses. **14**
- OR**
- (i) Discuss general characteristics of viruses. **7**
- (ii) Explain methods of enumeration of viruses. **7**
- (B) Answer in **one** or **two** lines : (Any **four**) **4**
- (i) Name two enveloped viruses.
- (ii) What are negative sense RNA viruses ?
- (iii) Which two sites of an embryonated egg is often used to grow animal viruses ?
- (iv) Define cytopathic effect.
- (v) Write full form of ICNV.
- (vi) Define prions.
2. (A) Explain lysogenic cycle of λ phage and mechanism of establishment of lysogeny. **14**
- OR**
- (i) Write a note on host induced modifications. **7**
- (ii) Explain replication of animal viruses. **7**
- (B) Answer in **one** or **two** lines : (Any **four**) **4**
- (i) What is burst size ?
- (ii) Define prophage.
- (iii) Name a single stranded DNA phage.
- (iv) Write an example of persistent viral infection.
- (v) What are Negri bodies ?
- (vi) Write two names of plant viruses.

3. (A) Explain media and method used for cultivation of fungi. 14

OR

(i) Write a note on plant disease caused by fungi. 7

(ii) Discuss secondary metabolites of fungi and its importance. 7

(B) Answer in **one** or **two** lines : (Any **three**) 3

(i) What is coenocytic hyphae ?

(ii) Define dimorphism.

(iii) What are haustoria ?

(iv) Name two industrially produced primary metabolites of fungi.

(v) Name two yeasts pathogenic to animals.

4. (A) Discuss sexual methods of reproduction in fungi. 14

OR

(i) Discuss parasexual cycle and its significance. 7

(ii) Explain life cycle of basidiomycetes. 7

(B) Answer in **one** or **two** lines : (Any **three**) 3

(i) What are chlamydospores ?

(ii) Define fruiting body.

(iii) Write two economic importance of ascomycetes.

(iv) What is clamp connection ?

(v) Write two names of fungi belonging to class phycomycetes.
