

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  $\lambda$  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.

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