

AD-112

April-2015

B.Sc., Sem.-VI

**Paper-308 : Microbiology
(Virology & Mycology)**

Time : 3 Hours]

[Max. Marks : 70

- Instructions :** (1) Attempt **all** questions.
(2) Draw figures wherever necessary.
(3) **All** questions carry equal marks.

1. Answer the following (any **two**) : **14**
(A) Describe the general structural properties of viruses.
(B) Explain the principles of viral taxonomy.
(C) What are subviral entities ? Explain viroids in detail.
(D) Describe the methods of enumeration of viruses.
2. Explain the following (any **two**) : **14**
(A) Replication of animal viruses.
(B) Single stranded DNA phage.
(C) Types of viral infections and their effect on host cell.
(D) Lysogenic conversions.
3. Describe the following (any **two**) : **14**
(A) Hyphal modifications of fungi.
(B) Preservation of fungi.
(C) Secondary metabolites of fungi and their significance.
(D) Fungal plant diseases.
4. Explain the following (any **two**) : **14**
(A) Asexual reproduction in fungi.
(B) Fruiting bodies of fungi.
(C) Criteria used for fungal classification.
(D) Ascus development.

5. Answer in short (not more than 2 lines) :

14

- (A) What is meant by cytopathic effect ?
 - (B) Give one example of RNA phage.
 - (C) What are secondary cell lines ?
 - (D) What is meant by plus strand RNA ?
 - (E) Give one example of virulent double stranded DNA phage.
 - (F) Differentiate between dikaryotic and diploid cell.
 - (G) What is dolipore septum ?
 - (H) Why rose Bengal medium is selective for fungi (give any two reasons) ?
 - (I) Define eucarpic fungi.
 - (J) What is meant by homothallism ?
 - (K) Differentiate between gametangial contact and gametangial copulation.
 - (L) What is dermatomycosis ?
 - (M) Define prophage.
 - (N) What is clamp connection ?
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