

**KALIGANJ GOVERNMENT COLLEGE**

**CLASS TEST dated 29/01/2016**

**Subject- Botany (Honours)**

**Topic- Virus**

**Question Set- A**

**Full Marks - 25**

**Time: 45 mins**

1. Answer the followings:

**5×1=5**

- Distinguish between Prion and Viroid.
- What do you mean by Retrovirus. Cite an example.
- What is concatemer?
- Name an double stranded RNA virus and single stranded DNA virus.
- What is Capsomere? Name a virus having Helical Capsid.

2. Answer the followings:

**4×3=12**

- State the salient features of virus.
- With suitable diagrams describe the Lysogenic cycle of bacteriophage . What is virulent phage? Cite an example.
- Point out the main structural difference between T4 and  $\lambda$  phage. Name two important proteins the concentration of which decide to initiate lytic and lysogenic cycle.

3. With the help of suitable diagram draw and describe the structural features of Influenza

Virus. Comment on the genome stating the unique features present in it.

**5+3 = 8**

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**Question Set- B**

**Full Marks - 25**

**Time: 45 mins**

1. Answer the followings:

**5×1=5**

- What is Virusoid. Give an example of a Prion related disease.
- What do you mean by segmented genome. Cite an example.
- Name a positive stranded ssRNA virus and a negative stranded ssRNA virus.
- What do you mean by naked virus. Cite an example of a enveloped virus.
- Name a viral disease transmitted by Aphid and transmitted by fungi.

2. Answer the followings:

**4×3=12**

- With suitable examples and figures write a note on Capsid symmetry in Viruses.
- With suitable diagrams describe the Lytic cycle of bacteriophage. Which type of bacteriophage perform Lysogenic cycle.
- What are Hemagglutinin and Neuraminidase? Name a virus carrying Reverse transcriptase stating the role of the enzyme in the infection process of the virus.

3. With the help of suitable diagram draw and describe the structural features of T4 bacteriophage .Comment on the genome stating the unique features present in it.

**5+3 = 8**