

(20518)

Roll No. _____

B. Sc.(Biotech.)-III Year

NS-3475

B. Sc. (Biotechnology) Examination, May 2018

Molecular Virology

(B-303)

(New)

Time : Three Hours]

[Maximum Marks : 75

Note: Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions. Each question carries 3 marks. Very short answer is required not exceeding 75 words. $3 \times 5 = 15$

1. Viron.
2. Gene silencing.
3. HIV.

4. ELISA.
5. Antiviral assay.

Section-B

(Short Answer Questions)

Attempt any *two* questions out of the following three questions. Each question carries $7\frac{1}{2}$ marks. Short answer is required not exceeding 200 words. $7\frac{1}{2} \times 2 = 15$

6. Give a brief account of classification of animal virus.
7. Genome organization of any plant virus and its application.
8. Give an account of important diseases caused by animal viruses.

Section-C

(Detailed Answer Questions)

Attempt any *three* questions out of the following five questions. Each question carries 15 marks. Answer is required in detail. $15 \times 3 = 45$

9. Explain in detail the replication of RNA viruses.

10. Discuss the suppressors of RNA silencing encoded by plant viruses and their role in viral infection.
11. Write notes on the following :
 - (a) Role of electron microscopy in diagnosis of viral infection.
 - (b) ISEM.
12. Explain in detail the serological method that is direct, indirect and sandwich ELISA used for quantification of viruses.
13. Write notes on the following :
 - (a) Application of PCR
 - (b) Satellite virus.