

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc.Winter, 2018-19 Examination

Semester: 2
Subject Code: 11201151
Subject Name: Molecular Virology

Date: 17/12/2018
Time: 10:30 am to 01:00 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
 Methods of cultivation, detection, and maintenance of viruses .
- Q.1. B) Answer following questions (Any two)**
- (a) Structure and replication of TMV. (04)
- (b) Classify the viruses. (04)
- (c) Structure and replication of Cauliflower mosaic virus. (04)
- Q.2. A) Answer the following questions.**
- (a) Write a note on Lytic ds linear DNA virus T2. (04)
- (b) Write a note on ss Circular DNA virus (\emptyset X 174). (04)
- Q.2. B) Answer the following questions (Any two)**
- (a) Short note questions. (Each of 01 marks) (03)
1. Define virus.
 2. Define lytic cycle
 3. Define lysogeny cycle
- (b) Why are virus alive / dead explain? (03)
- (c) Describe the morphological types of viruses. (03)
- Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
 Male specific filamentous ss RNA virus F17 and M13
- Q.3. B) Answer the following questions (Any two)**
- (a) What is antigenic shift with respect to Human Flu? Explain? (04)
- (b) Describe the Nucleic acid types of viruses. (04)
- (c) What is Host range of virus? How is it important? (04)
- Q.4. A) Answer the following questions.**
- (a) How do cells effect post virus infection? (04)
- (b) Illustrate the life cycle of virus. (04)
- Q.4. B) Answer the following questions (Any two)**
- (a) Short note/ Multiple choice questions. (Each of 01 marks) (03)
1. What is David Baltimore's contribution?
 2. What is Reovirus?
 3. What are Viral plaques?
- (b) How is QT-PCR used for copy number estimation of virus? (03)
- (c) Describe role of ICTV. (03)