

## Department of Biosciences and Bioengineering Indian Institute of Technology Guwahati Guwahati 781039 Assam, India

Course: BT-616 Molecular Virology (Quiz)

Total marks-15

Name RICHA SINGH

Date: 21/04/2023 Total time: 60 mins Roll No- 22 4111005

Each curries I mark

QNo 1-10

## Each ournes 5 marks

Q No 11. A newly isolated virus GTII was shown to bind with Semaphorin. What advantage this virus will have as compared with others? Design an experiment to show that the surface protein of GTII can bind to Semaphorin?

Q No 12 Assuming that Nipah virus infection has shown reducing the pathogenicity in Malaria patients? Cars Nipah & used as drug to treat Malaria? Justify your answer with example

e No 13. Some recent studies from IIT Guwahati has shown that Indian gooseberry (Amla/ अपन्यकी /amalakt)
reduce the poliovirus infection in young ones. Justify the findings with experiments.

Q No 14. Studies have proved that the landslides in Northeast are associated with a virus. Justify the findings with experiments.

No 15. A newly isolated virus from cow is shown to integrate with the host genome. There is a concern raised by the department of dairying for the quality of milk and its consumption. Give your opinion and design an experiment to prove your points.

Q No 16. A newly isolated virus from fish is shown to downregulate the type II interferons? How to prove the hypothesis with an experiment?

No 17. There is a sudden rise in the cases of flu like illness in the poultry farm around the Kamrup district of Assum. The poultry were tested negative for influenza virus infection. What could be your interpretation and how can you prove it experimentally?