



ADMISSION NUMBER

## School of Biological and Life sciences

Master of Science in Microbiology  
Semester End Examination - Aug 2024

Duration : 180 Minutes  
Max Marks : 100

### Sem II - P1PT201T/MSMB5014 - Advanced Virology

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Define history of vaccines especially against smallpox and polio. K1(2)
- 2) Explain the applications of tissue culture methods in the field of virology. K2(4)
- 3) Explain the adsorption & penetration of bacteriophage into a host cell. K2(6)
- 4) Construct the structure of TMV and write its properties . K3(9)
- 5) Apply the applications of gradient centrifugation method for the detection of virus. K3(9)
- 6) Explain the cultivation of virus using embryonated egg with a neat labelled diagram. K5(10)
- 7) Analyze the PSTV along with its charactersitic features, genome organization, disease symptoms and control measures. K4(12)
- 8) Appraise the importance of a vector in the transmission of a plant virus. K5(15)
- 9) Explain the following terms with reference to viral multiplication cycle- Rise period, Eclipse period, Burst size, Latent period. K5(15)
- 10) Prove the synthesis of DNA from RNA during reverse transcription in Retro virus. K6(18)