M.Sc., MOLECULAR VIROLOGY (for Candidates admitted from 2009-2010 Batch onwards) FIRST YEAR PAPER I – BASIC MICROBIOLOGY, VIROLOGY AND IMMUNOLOGY

Q.P. Code: 289125

Time: Three hours Maximum: 100 marks

I. Elaborate on : $(2 \times 20 = 40)$

1. Define and classify sterilization. Write in detail about sterilization by most heat.

2. Write in detail invitro tissue culture methods. Include a note a nutritional requirements and cytopathic effects.

II. Write notes on : $(10 \times 6 = 60)$

- 1. Hot air oven.
- 2. Phase contrast microscopy.
- 3. Sterilization by radiation.
- 4. Monoclonal anti bodies Principles of application.
- 5. Requirements of molecular virology laboratory.
- 6. Flow cytometer.
- 7. Immuno surveillance.
- 8. Experimental models in Antigen Presenting Cells (APC).
- 9. Organ culture method.
- 10. Cell growth and differentiation factors.
