

(LP 117)

OCTOBER 2019

Sub. Code: 2014

**M.D. DEGREE EXAMINATION
BRANCH IV – MICROBIOLOGY**

PAPER I – GENERAL MICROBIOLOGY AND IMMUNOLOGY

Q.P. Code: 202014

Time: Three Hours

Maximum: 100 Marks

I. Essay:

(2 x 15 = 30)

1. Describe the structure and functions of bacterial cell organelles. Discuss in detail about the antigenic and virulence mechanisms of these cell organelles.
2. Write in detail about production, storage and uses of Monoclonal antibodies.

II. Short notes:

(10 x 5 = 50)

1. L forms.
2. Ames test.
3. Biological Indicators of Sterilization.
4. Flagella staining.
5. Confocal Microscopy.
6. Hyperacute Graft rejection.
7. IgM.
8. Toll like receptors (TLR).
9. NK cells.
10. Complement fixation test.

III. Reasoning Out:

(4 x 5 = 20)

1. Autoclave sterilization process is not suitable for Lowenstein Jensen medium.
2. Catalase activity of bacteria is not performed with colonies on Blood agar.
3. CLED medium is preferred over MacConkey for urinary pathogens.
4. Spore forming bacterium used as biological indicators of sterilization.
