



**AB-4206**  
**P. G. D. M. L. T. Examination**  
**April/May – 2015**  
**Paper - I : Microbiology & Immunology (New)**

Time : 3 Hours]

[Total Marks : 70

**Instruction :**

(1)

<p>नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य कर्तवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : <b>P. G. D. M. L. T.</b></p> <p>Name of the Subject : <b>PAPER - I : MICROBIOLOGY &amp; IMMUNOLOGY (NEW)</b></p> <p>Subject Code No. : <b>4 2 0 6</b> Section No. (1, 2,...): <b>1&amp;2</b></p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; height: 60px; display: flex; align-items: center; justify-content: center; margin-top: 10px;">Student's Signature</div>
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- (2) Answers to each section to be written in separate answer books.
- (3) Answer all the questions.
- (4) Draw neat and labelled diagrams wherever necessary.
- (5) Figures to the right indicate full marks of the question.

**Section-I**

1 Write detailed on: Antigenic structure, Pathogenicity, cultivation and lab diagnoses of "Staphylococcus". 12

**OR**

1 Define Mycosis. Give detail classification of pathogenic fungi and opportunistic fungi. 12

2 Write short notes on any **THREE**. 15

- (a) Louis Pasteur.
- (b) Significance of Bergey's manual.
- (c) Bright field microscopy
- (d) Dengue.
- (e) Quality control in Microbiology.

- 3** Write in short on any **FOUR**. **8**
- (a) Differentiate : Gram staining and Acid-fast staining.
  - (b) Write general properties of viruses.
  - (c) Define decontamination. Enlist its methods.
  - (d) Explain Hepatitis. Name the causative agents for it.
  - (e) What is bacteriological media? State its significance.
  - (f) Write full form of CMV and name the infection caused by it.

### **Section - II**

- 1** Write in detail on Classification of immune system. **12**
- OR**
- 1** Differentiate and explain in detail : ELISA Vs RIA. **12**
- 2** Write short notes on any **THREE**. **15**
- (a) PCR.
  - (b) Vaccination schedule in India.
  - (c) Tuberculin skin test.
  - (d) Monoclonal Vs Polyclonal antibodies.
  - (e) Fluorescent antibody techniques.
- 3** Write in short on any **FOUR**. **8**
- (a) Name the medium and cells that are used in monoclonal antibody production.
  - (b) Define vaccine. Give its importance.
  - (c) Define complements and state its significance.
  - (d) Explain principle and significance of Westernblot technique.
  - (e) Name the scientist who discovered Hypersensitivity. Enlist its classes.
  - (f) Contrast : Immunogen and Immunogenicity.