



**NAV-9048**

Seat No. \_\_\_\_\_

**M. D. (Branch - IX) Examination**

**March / April - 2017**

**Microbiology : Paper - I**

**(General Microbiology & Immunology)**

Time : **3** Hours]

[Total Marks : **100**

Instructions :

- (1) Figures on right hand side indicates full marks.
- (2) Draw neat and clean diagram wherever necessary.

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|---|--|----|
| 1 | Explain biosafety level and describe various biosafety levels specified while working with micro-organism.                                 | 33 |
| 2 | Write mechanism of cell mediated immune response and Parameters of CMI.  | 33 |
| 3 | Write notes on :<br>(a) Microbial typing and its applications<br>(b) Immunological tolerance and mechanisms of various autoimmune disease. | 34 |

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