



**JB-3102**  
**Second Year B. Sc. (Sem. III) Examination**  
**March/April – 2013**  
**MB-05 : Control of Microorganisms**

Time : Hours]

[Total Marks : 50

**Instructions :**

(1)

<p>नीचे दृशावेव निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination :</p> <p>Second Year B. Sc. (Sem. 3)</p> <p>Name of the Subject :</p> <p>MB-05 : Control of Microorganisms</p> <p>Subject Code No. : 3 1 0 2 Section No. (1, 2,.....): Nil</p>	<p>Seat No. :</p> <table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td></tr></table> <div style="border: 1px solid black; border-radius: 15px; width: 100%; height: 80px; display: flex; align-items: center; justify-content: center; margin-top: 10px;">Student's Signature</div>						

(2) Figures to the right indicate full marks of the question.

(3) Draw neat diagrams wherever necessary.

1 Give specific answers : 10

- (a) How populations of microorganisms influence the effectiveness of anti-microbial agents ?
- (b) What is Thermal Death Point ?
- (c) List several kinds of radiations that are destructive to microorganisms.
- (d) Enlist four examples of heavy metals, used as antimicrobial.
- (e) How phenol is useful for evaluation for different disinfections ?

2 Explain with examples : (any two) 12

- (a) Describe how an autoclave works.
- (b) Bacteriological filters.
- (c) Quaternary ammonium compounds.

- 3** Answer the following in detail : (any **two**) **16**
- (a) Explain the characteristics of an ideal anti-microbial agent.
  - (b) Halogen compounds - widely used disinfectants.
  - (c) Explain the term - cationic detergent. Describe their mode of action and practical uses.
- 4** Write short notes on : (any **three**) **12**
- (a) Formaldehyde as an antimicrobial agent.
  - (b) Triphenylmethane dyes : their mode of action and practical uses.
  - (c) Desiccation.
  - (d) Describe the pattern of microbial growth.
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