



**DPP-1405**  
**M. Sc. (Sem. II) Examination**  
**April / May - 2016**  
**MB-204 : Microbiology**  
*(Microbial Ecology & Environmental Microbiology)*

Time : 3 Hours]

[Total Marks : 70

**Instructions :**

(1)

<p>नीचे दशांशवैल निशानीवाणी विगतो उत्तरवडी पर अवश्य क्षभवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : M. Sc. (SEM. 2)</p> <p>Name of the Subject : MB-204 : MICROBIOLOGY</p> <p>Subject Code No. : 1 4 0 5 Section No. (1, 2.....): Nil</p>	<p>Seat No. : □ □ □ □ □ □</p> <p style="text-align: center; border: 1px solid black; border-radius: 15px; padding: 10px;">Student's Signature</p>
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- (2) Figures to the right indicate full marks of the question.  
(3) Draw neat and labelled diagrams whenever necessary.

1 Explain any two of the followings : 18

- (a) Discuss : Woesean Revolution and its impact on microbial ecology.  
(b) Justify : Biodiversity can be measure by different criteria.  
(c) Explain : Metagenomics libraries are useful for uncultured microorganisms.

2 Explain any two of the followings : 18

- (a) Give details on physical characteristics of wastewater.  
(b) Discuss in detail on biotreatment of sugar and distillery waste.  
(c) Give sources of nuclear waste. Write details on bioremediation and phytoremediation of different nuclear wastes.

- 3** Discuss detail on any two of the following .: **18**
- (a) Discuss : Fundamentals of biodegradation v/s growth-linked biodegradation.
  - (b) Explain : Inoculation and cometabolism have significance in biodegradations.
  - (c) Give detailed account of biodegradation of dyes.
- 4** Write short notes on any two of the following : **16**
- (a) Microbial transformations of Pesticides.
  - (b) Genes involved in heavy metals and resistance development in bacteria and fungi.
  - (c) Bioprospecting and its significance.
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