



AC-2970
First Year B. Sc. (Sem. II) (Microbiology)
Examination
April / May - 2015
MB-03 : Microbial Growth and Cultivation

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

<p>नीचे दृशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : First Year B. Sc. (Sem. II) (Microbiology)</p> <p>Name of the Subject : MB-03 : Microbial Growth and Cultivation</p> <p>Subject Code No. : 2 9 7 0 Section No. (1, 2,.....): Nil</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; padding: 10px; text-align: center; width: 100%;">Student's Signature</div>
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- (2) Figures to the right indicate full marks of the question.
(3) Draw neat and labelled diagrams whenever necessary.

Que 1 Give specific answers of the following. [12]

1. Differentiate between Microelements and Macroelements along with examples.
2. Define growth. Enlist the four phases of the growth curve in a closed system.
3. Enlist the major functional types of media. Give an example of each.
4. Define Barophiles with its examples.
5. Explain growth factors. Enlist its classes.
6. Define starvation protein. Give its function.

QUE 2 Explain/comments on any two of the following. [12]

1. Osmotic pressure plays a very important role on various microbial growths.
2. Various methods are available for isolation of pure culture.
3. Explain in detail facilitated diffusion for nutrient uptake by the cell.

Que 3 Discuss any two of the following.

[16]

1. Discuss the technique for the determination of microbial population number.
2. Explain in detail influence of Temperature on microbial growth.
3. Discuss in detail active transport mechanism for nutrient uptake by the cell.

Que 4 Write short notes on any two of the following:

[10]

1. Growth factor.
 2. The Chemostat.
 3. Effect of pH on the growth of Microorganisms.
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