



DPP-2970

B. Sc. (Microbiology) (Sem. II) Examination
March / April - 2016

MB-03 : Microbial Growth & Cultivation - II

Time : 3 Hours]

[Total Marks : 70

Instruction :

नीचे दशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लखवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. Sc. (Microbiology) (Sem. II)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="MB-03 : Microbial Growth & Cultivation - II"/>	<input type="text"/>
Subject Code No. : <input type="text" value="2"/> <input type="text" value="9"/> <input type="text" value="7"/> <input type="text" value="0"/>	Section No. (1, 2,.....) : <input type="text" value="NIL"/>
Student's Signature	

1 Give specific answers of the following : 12

- (1) Explain : siderphores. Give its two importance.
- (2) What is the chemical nature of Agar? From where it is usually extracted?
- (3) What is the salt concentration used in M.S.A. Name one organism for it is used.
- (4) Define :
 - (a) VBNC
 - (b) Generation Time.
- (5) Differentiate between balanced growth and unbalanced growth.
- (6) Define :
 - (a) Water activity
 - (b) Osmotolerant microbes.

- 2 Explain / Comment on Any Two the following : 12**
- (1) Justify : ABC transporter and porin are different in terms of functions and cellular location.
 - (2) Explain how direct counting is the most obvious way to determine microbial number.
 - (3) Justify : Various types of oxygen relationships are observed in microorganisms.
- 3 Describe in detail any two of the following : 16**
- (1) Define : Culture media. Explain various types of media based on chemical composition.
 - (2) Describe in detail two different types of continuous culture systems.
 - (3) Define : Acidophiles. Describe the various classes of microorganisms based on their pH range for growth.
- 4 Write short notes on Any two of the following : 10**
- (1) Passive diffusion Vs Facilitated diffusion
 - (2) Selective and Differential media : EMB Agar
 - (3) Nutritional types of Microorganisms.
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