



AD-3233

**Third Year B. Sc. (Microbiology) (Sem. VI)
Examination**

March/April – 2015

MB - 18 : Principles of Industrial Microbiology

Time : Hours]

[Total Marks : 50

Instruction :

नीचे दर्शावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लपनी. Fillup strictly the details of signs on your answer book.		Seat No. :
Name of the Examination :		<input type="text"/>
THIRD YEAR B. SC. (MICROBIOLOGY) (SEM. VI)		<input type="text"/>
Name of the Subject :		<input type="text"/>
MB - 18 : PRINCIPLES OF INDUSTRIAL MICROBIOLOGY		<input type="text"/>
Subject Code No. : <input type="text"/> 3 <input type="text"/> 2 <input type="text"/> 3 <input type="text"/> 3		Student's Signature
Section No. (1, 2,.....) : Nil		

- 1 Give Specific answers: 12
- Give two examples of primary and secondary metabolites.
 - List any four mutagens that affect non replicating DNA.
 - How scale up differs from scale down?
 - How solid state fermentation process differs from surface fermentation process?
 - What is the difference between up stream and down stream process?
 - Define: Trophophase & Idiophase.
- 2 Explain / Comment on any two of the following: 12
- Louis Pasteur is known as the father of fermentation technology.
 - Different methods are used for sterilization of production medium.
 - Different types of extractor are used in product recovery.

- 3** Attempt any two of the following in detail: **16**
- (a) How industrial and agricultural by products are used as a carbon source in fermentation medium?
 - (b) How regulation is used as an approach for strain development?
 - (c) Discuss the types of chromatographic techniques used in product recovery.
- 4** Write Short notes on any two of the following: **10**
- (a) Screening of antibiotic producing microorganisms
 - (b) Aeration and agitation systems of fermenter.
 - (c) Drying.
 - (d) Sterilization of equipments.
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