



JB-3134

**Second Year B.Sc. (Sem. III) (CBCS)
(Medical Technology) Examination**

March/April – 2013

MT-05 : Microbial Metabolism & Genetics

Time : Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दृश्यादिब निशानीवाणी विगतो उत्तरवाडी पर अवश्य लपवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
S. Y. B.SC. (SEM. 3) (CBCS) (MEDICAL TECH.)

Name of the Subject :
MT-05 : Microbial Metabolism & Genetics

Subject Code No. : **3 1 3 4** Section No. (1, 2,.....): **Nil**

Seat No. :
[] [] [] [] [] []

Student's Signature

(2) Figures on right indicate full marks.

(3) Draw labelled diagram where necessary.

1 Answer the following in brief : 8

- Give the location and function of electron transport chain in Prokaryotes and Eukaryotes.
- What are sense and nonsense codons ?
- Give various energy rich compounds and their functions.
- Why are plate count results expressed as colony forming units ?

2 Explain any two of the following : 14

- How does an open system differ from closed culture system ? Explain in detail continuous culture system.
- Explain in detail electron transport chain and its role in energy generation.
- Explain the maintenance and preservation of microbial cultures.

- 3** Attempt any **two** of the following : **14**
- (a) Generalized transduction Vs. Specialized transduction.
 - (b) Turbidostat Vs. Chemostat.
 - (c) Process of Translation.
- 4** Write notes on any **two** of the following : **14**
- (a) DNA replication.
 - (b) Microbiological medias.
 - (c) Oxygen tolerance in microorganisms.
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