RAN-2003000204020071

RAN-2003000204020071

S. Y. B. Sc. (MLT) (Sem. - IV) Examination April - 2023

Medical Laboratory Technology

Microbial Metabolism and Genetics : Paper - VIII

Time: 2 Hours] **[Total Marks: 50**

સૂચના : / Instructions

(1) નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of ☛ signs on your answer book
Name of the Examination:
☛ **S. Y. B. Sc. (MLT) (Sem. - IV)**
Name of the Subject :
☛ **Medical Laboratory Technology Microbial Metabolism and Genetics : Paper - VIII**
Subject Code No.: **2003000204020071**

Seat No.:

Student's Signature

(2) Figures to the right indicate the full marks of the questions.
(3) Draw the figures wherever necessary.

Set - I

Q. 1. Answer in brief: **(08)**

(a) Enlist the three ways by which the metabolic pathways can be regulated?

(b) Define: Photoautolithotrops giving suitable examples.

(c) What are Okazaki Fragments? Which enzyme join them?

(d) What are transposons?

Q. 2. Comment / Justify on any two of the following : (Any 2) **(12)**

(a) ETC as an electron transport chain.

(b) Genetic code is a triplet codon.

(c) Bacteria have developed various mechanism for drug resistance.

Q. 3. Answer the following: (Any 2) **(16)**

(a) Discuss the principles governing biosynthesis.

(b) Compare and contrast $F^{+}x\ F^{-}$ and F' X F^{-} conjugation.

(c) Regulation of expression of Gene Through Lac Operon Model.

Q. 4. Write notes on the following: (Any 2) **(14)**

(a) Redox reactions.

(b) Elongation and termination of protein synthesis.

(c) Generalised transduction.
