



**RF-3437-38**

**M. Sc. (Part-I) Examination**

**April / May – 2010**

**Medical Technology : Paper - IV**  
*(Microbial Genetics)*

Time : 3 Hours]

[Total Marks : 54

**Instructions :**

(1)

नीचे दृष्टावेव 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"/>
<input type="text" value="M. Sc. (Part-1)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Medical Technology - 4"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="4"/> <input type="text" value="3"/> <input type="text" value="7"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	

1 What is DNA replication? Write enzyme involved in DNA replication. 15

**OR**

1 What is Translation? Write molecular mechanism of translation and effects of antimicrobials on translation. 15

2 Write any two: 12  
(a) Classes of RNA Molecules  
(b) RAPD Analysis  
(c) in Situ PCR.

3 What is Transcription? Write molecular mechanisms of Transcription. 12

**OR**

3 Write DNA Damage and repair mechanisms. 12

4 Write short notes on any three: 15  
(a) Gel Electrophoreses  
(b) Transposable genetic Element  
(c) Fluorescent based in situ Hybridization (FISH).  
(d) Transcription Mediated Amplification.  
(e) Procedure for cloning foreign DNA in a Plasmid Vector.