



V.P & R.P.T.P SCIENCE COLLEGE

B.Sc. Microbiology (USO5CMIC01)

INTERNAL TEST

29/09/2016 (Thursday)

11:00a.m to 12:30 p.m

Note: All the questions are compulsory

Figures on the right indicate marks

Marks (25)

- Q- 1) Attempt the following multiple choice questions. (03)
- i) This rRNA is present on the small ribosomal subunit of prokaryotes.
(a) 23 S rRNA (b) 16 S rRNA (c) 5 S rRNA (d) All of these.
 - ii) Reverse gyrase is an example of :
(a) Topoisomerase (b) helicase (c) DNA polymerase (d) primase
 - iii) Telomerase is an example of :
(a) DNA dependent DNA polymerase
(b) DNA dependent RNA polymerase
(c) RNA dependent DNA polymerase
(d) RNA dependent RNA polymerase
- Q-2) Attempt the following short questions (2 out of 3) (04)
- i) What is the contribution of F. Griffith?
 - ii) Mention any two difference between bacterial DNA polymerase I & II
 - iii) Mention the -10 and -35 sequences of strong promoters in prokaryotes.
- Q-3) Describe Watson & Crick model of DNA. (06)
- OR
- Q-3) With a neat diagram , discuss the structure of t-RNA . (06)
- Q-4) Describe Meselson & Stahl experiment . (06)
- OR
- Q-4) (a) Explain initiation of DNA replication in prokaryotes. (03)
(b) Explain rolling circle model of DNA replication. (03)
- Q-5) Describe intron splicing in RNA. (06)
- OR
- Q-5) Describe regulation of gene expression at the level of transcription. (06)