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School of Biomedical Science
Bachelor of Science in Medical Biotechnology
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem IV - Q1UG402T - Recombinant DNA Technology Tools and Techniques

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Classify different kinds of methyltransferases. K2 (2)
- 2) Define restriction enzymes and classify them. K1 (3)
- 3) Explain the mechanism of action of PNPase enzyme. K2 (4)
- 4) Explain the mechanism of action of Ligases and Ribonucleases. K2 (6)
- 5) Build the reverse primer of the given forward primers and identify the restriction site in it: a.) 5' GGACTAGTATGCCGTCACCTTCCCAAG 3'
b.) 5'GGACTAGTATGTTTCGGCGAGTCGTACG 3' K3 (6)
- 6) Make use of proper illustrations to explain the differences in the mechanism of action of two types of RNAses K3 (9)
- 7) Analyze and explain the steps involved in cloning of a gene. K4 (8)
- 8) Analyze the uses of PNK enzyme and the way it carries out its enzymatic activity. K4 (12)

OR

Analyze the PCRs done for the diagnosis of microbial infection in any sample. K4 (12)