

School of Biomedical Science

**Bachelor of Science in Clinical Nutrition and Dietetics
Summer & Backlog - Semester End Examination - Jul 2024**

**Duration : 180 Minutes
Max Marks : 100**

Sem I - Q1UF104C /Q1UF102T - Molecular Biology*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

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| 1) | Tell the role of DNA primase. | K1(2) |
| 2) | Discuss the subunits of RNA Polymerase | K2(4) |
| 3) | Identify, list and discuss the role of the transcription factors that are involved in the initiation step. | K2(6) |
| 4) | Analyze the process of post-transcriptional modifications of RNA in eukaryotes. | K3(9) |
| 5) | Use your knowledge of nucleotide sequences to explain the occurrence of introns. | K3(9) |
| 6) | Evaluate the importance of exons | K5(10) |
| 7) | Examine the different types of DNA repair mechanisms. | K4(12) |
| 8) | Elaborate each of the six types of eukaryotic DNA polymerases. | K5(15) |
| 9) | Evaluate the role of UV as a potent mutagen | K5(15) |
| 10) | Compile the process of transcription in eukaryotes. | K6(18) |