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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 II - Q1UG204B - Medical Microbiology

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) Explain, how does the growth rate change in each phase of the bacterial growth curve? K2 (2)
- 2) Define the four phases of the bacterial growth curve. K1 (3)
- 3) Explain, what factors can influence the growth curve of bacteria? K2 (4)
- 4) Explain, why is the logarithmic phase of bacterial growth important in biotechnology and research? K2 (6)
- 5) Illustrate Biological Effects of temperature on microorganisms and its adaptations. K3 (6)
- 6) Illustrate effects of solutes, water activity and pH on microorganisms with its adaptations. K3 (9)
- 7) Analyze the effects of pressure and radiation on microorganisms and its adaptations. K4 (8)
- 8) Analyse the size of the bacterial population after 2 hours if a bacterial culture initially contains 1500 bacteria and double every half an hour. K4 (12)

OR

Analyze the life cycle of filarial parasites, including the role of the vector in transmission and the development of microfilariae in the human host. K4 (12)