School of Basic and Applied Sciences

BioScience

ETE - Jun 2024

Time : 3 Hours **Marks :100**

Sem II - MBAMTT2003 - Molecular Diagnostics

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

1.	Define virulence factors with examples.	K1 CO1 (4)
2.	Differentiate between susceptibility and diagnostic biomarker.	K2 CO2 (4)
3.	Define TAT and its significance in molecular diagnosis.	K1 CO3 (4)
4.	Define paratope and HAT medium.	K2 CO4 (4)
5.	Define aptamers and enlist four SNP databases.	K2 CO5 (4)
6.	Discuss the immune response during bacterial infection.	K3 CO1(10)
7.	Explain the role of POCT in management of infectious and chronic disease.	K3 CO2(10)
8.	MALDI-TOF mass spectrometry is an emerging technology in protein-based diagnostics. Justify the statement.	K4 CO6(12)
9.	Discuss the diagnostic strategies for bloodstream infections.	K3 CO3(16)
10.	Explain the principle of monoclonal and polyclonal antibody. Describe the mechanism of action of rituximab.	K4 CO4 (16)
11.	Discuss the significance of DNA sequencing techniques in molecular diagnostics. Give two advantages and disadvantages of next-generation nucleotide sequencing	K3 CO5(16)