

Q3.	<p>a) Name one diagnostic biomarker used in prostate cancer.</p> <p>b) Which gene variants influence warfarin metabolism and sensitivity?</p> <p>c) State one application of microbial biosensors.</p> <p>d) Mention a checkpoint inhibitor drug used in PD-L1 positive cancers.</p> <p>e) Give one example of a wearable biosensor.</p>	III	[1 X 5 = 5]
Q4.	<p>a) Describe the working principle of biosensors with reference to their core components.</p> <p>b) A diabetic patient uses a glucometer. Explain the biosensor principle behind glucose monitoring.</p>	V	[3+2=5]
Q5.	What is pharmacogenomics and why is it considered the foundation of personalized therapy?	IV	[2]
Q6.	Explain the structure of Deoxyribose nucleic acid and Ribose nucleic acid. Among the two, which molecule is more stable and why?	I	[5]
Q7.	<p>Define the following in brief.</p> <p>a) Differentiate between Latent Tuberculosis and Active Tuberculosis</p> <p>b) Features of proteins with reference to primary, secondary and tertiary structures</p>	I, II	[6]