



K2 (2)

## **School of Biomedical Science**

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

**Duration: 90 Minutes** Max Marks: 50

## Sem IV - Q1UG401T - Biosensors and Nanobiotechnology

## **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 one dimensional Nanostrucures?	K2 (2)
2)	Define Biodegradable nanoparticles with classification?	K1 (3)
3)	Explain any two historical breakthrough of nanotechnology?	K2 (4)
4)	Explain approaches of nanoparticle production?	K2 (6)
5)	What challenges arise in ensuring the biocompatibility and safety of nanomaterials illustrated in biomedical applications?	K3 (6)
6)	How do nanoparticles illustrate enhanced targeted drug delivery in cancer treatment?	K3 (9)
7)	How to analyze and select a nanometerial candidate for drug delivery?	K4 (8)
8)	Analyze the impact of nanomaterials on biotechnology, considering their roles in drug delivery, imaging, biosensing, and tissue engineering.	K4 (12)
OR		

K4 (12) Analyze how do chemoreceptors, baroreceptors, and touch receptors differ in terms of their physiological functions,