

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

School of Biomedical Science**Master of Science in Medical Biotechnology
Semester End Examination - Nov 2023****Duration : 180 Minutes
Max Marks : 100****Sem III - MBAMBT3004 - Biomaterials and Tissue Engineering**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) Show the Pharmacological acceptability K1 (2)
- 2) Illustrate the Artificial Ligaments and Tendons. K2 (4)
- 3) Outline the Grain boundaries. K2 (6)
- 4) Identify the various methods used for disinfection and sterilization of biomaterials. K3 (9)
- 5) Construct the Necking and Drawing. K3 (9)
- 6) Interpret the formation of foreign body giant cells (FBGCs) on biomaterial surface. K5 (10)
- 7) Analyze the applications of ceramic implant materials – Alumina, Zirconia and Calcium phosphate. K4 (12)
- 8) Determine the intrinsic and extrinsic factors that can affect the Bone cement properties. K5 (15)
- 9) Assess the Stress–strain curves of hard-brittle, ductile-tough, and ductile-soft materials. K5 (15)
- 10) A researcher wants to evaluate the Hemocompatibility of newly developed scaffold, Construct the suitable assays and their significance. K6 (18)