

## Table of Specification –PhD Dental Materials- Spring 2024 NUMS Entry Test

S. No	Торіс	No. of MCQs
1.	Ceramics	
	<ul> <li>Fabrication techniques</li> </ul>	10
	o CAD-CAM	10
	<ul> <li>Porcelain-fused-to-metal</li> </ul>	
2.	Metallurgy	
	<ul> <li>Gold and Noble Metal Alloys</li> </ul>	07
	<ul> <li>Base Metal Alloys</li> </ul>	07
	<ul> <li>Steel and Wrought Alloys</li> </ul>	
3.	Polymers	
	<ul> <li>Denture base polymers</li> </ul>	03
	<ul> <li>Denture lining materials</li> </ul>	
4.	Impression Materials	07
	<ul> <li>Elastic impression materials</li> <li>Non Elastic impression materials</li> </ul>	07
	Non- Elastic impression materials	
5.	Adhesive Bonding	10
	<ul> <li>Enamel Bonding</li> <li>Doptin Bonding</li> </ul>	12
6.	<ul> <li>Dentin Bonding</li> <li>Composite resin and glass lonomer</li> </ul>	
	<ul> <li>Properties</li> </ul>	10
	<ul> <li>Setting Characteristics</li> </ul>	10
7.	Cements	
	<ul> <li>Phosphoric acid based</li> </ul>	
	<ul> <li>Organometallics-chelate based</li> </ul>	07
	<ul> <li>Polycarboxylates</li> </ul>	
	<ul> <li>Endodontics</li> </ul>	
8.	Dental Implants	
	<ul> <li>Types</li> </ul>	05
	<ul> <li>Osseo integration</li> </ul>	
9.	Tissue Engineering	
	<ul> <li>Biomaterials and scaffold fabrication</li> </ul>	12
	<ul> <li>Soft tissue engineering</li> </ul>	
	<ul> <li>Hard tissue engineering</li> </ul>	
	Characterization techniques	
10.	<ul> <li>Microscopy</li> <li>Spectroscopy</li> </ul>	10
	<ul> <li>Spectroscopy</li> <li>Mechanical</li> </ul>	12
	<ul> <li>Biological</li> <li>Biostatistics</li> </ul>	
11.		15
	<ul> <li>Research ethics and scientific writing</li> <li>Research methodology</li> </ul>	15
		100
	Total	100