Contents

Prefa	ce vii	2.4.	Intermediate restorative materials	107
Self-assessmentix		2.5.	Enamel and dentine bonding	113
A historical perspectivexi		2.6.	Endodontic materials	127
		2.7.	Impression materials	137
SECTION ONE: Basic science for dental materials		2.8.	Nanotechnology in dental materials	155
1.1.	Biomaterials, safety and biocompatibility 3			
1.2.	Atomic building blocks	SECTION THREE: Laboratory and related dental materials		
1.3.	Structure of ceramics			
1.4.	Structure of metals and alloys	3.1.	Models, dies and refractories	169
1.5.	Structure of polymers	3.2.	Denture base resins	
1.6.	Mechanical properties	3.3.	Casting alloys for metallic restorations	183
1.7.	Physical properties	3.4.	Dental ceramics	
1.8.	Chemical properties	3.5.		
1.9.	Principles of adhesion51	3.6.	All-ceramic restorations: high-strength core	
			ceramics	205
SECTION TWO: Clinical dental materials		3.7.	All-ceramic restorations: resin-bonded	
21	Dental amalgams 61		ceramics	209
2.2.	Resin composites and polyacid-modified resin	3.8.	Luting agents	215
	composites73	3.9.	Stainless steel	231
2.3.	Glass-ionomer cements and resin-modified			
	glass-ionomer cements	Inde		237