

Contents

Title	Page number
CHAPTER ONE: ((Earthquake))	
What is an earthquake?	1
How is earthquake measured?	2
How does ground shaking affect buildings?	2
Earthquake engineering	3
Hazards	3
Definitions	4
Vocabulary	7
Summative test	10
Answers	13
Progress check	16
Answers	20
CHAPTER TWO: ((Steel))	
Steel connections	24
Complexities of steel connections	25
Complexity of connection geometry	25
Geometric imperfections	25
Residual Stresses and Strains	26
Types of connections	26
Definitions	28
Vocabulary	29
Summative test	32
Answers	35
Progress check	37
Answers	42
CHAPTER THREE: ((Soil and soil classification))	
Soil and soil classification	47
Soil exploration	48
Definitions	50
Vocabulary	52
Summative test	55
Answers	58
Progress check	61
Answers	63
CHAPTER FOUR: ((The tallest Tower in the world))	
The tallest Tower in the world	65
The Burj Khalifa project	65
Shape of the tower	66
Structural System	66
Details of Foundation	67
Elevators and Lifts	68
Definitions	68
Vocabulary	69
Summative test	72
Answers	75

مدرسان
شريف



Contents

Title	Page number
Progress check	77
Answers	81
CHAPTER FIVE: ((THE TAMAR BRIDGE))	
THE TAMAR BRIDGE	85
Structural analysis	85
Construction Method	86
Future Changes	87
Durability & Serviceability	87
Worldwide Recognition	87
Definitions	88
Vocabulary	89
Summative test	92
Answers	95
Progress check	97
Answers	99
CHAPTER SIX: ((Dam))	
Dam	101
Type of dams and components	101
Embankment	102
Intake/Outlet Structures	103
Spillways	103
Definitions	104
Vocabulary	105
Summative test	107
Answers	109
Progress check	111
Answers	112
CHAPTER SEVEN: ((Aqueduct))	
What is aqueduct?	113
Classification of pipelines	113
Pipeline network	114
Initial injection station	114
Compressor/pump stations	115
Partial delivery station	115
Block valves station	115
Regulator station	115
Final delivery station	115
Sewage treatment	116
Definitions	116
Vocabulary	118
Summative test	121
Answers	124
Progress check	126
Answers	129

مدرسان
شريف



Contents

Title	Page number
CHAPTER EIGHT: ((Structural analysis))	
Structural analysis	131
Analytical methods	131
Definitions	134
Vocabulary	136
Summative test	138
Answers	141
Progress check	144
Answers	147
CHAPTER NINE: ((Vocabulary))	
Progress check	149
Answers	157
CHAPTER TEN: ((Grammar))	
Progress check	165
Answers	168
CHAPTER ELEVEN: ((Reading Comprehension))	
Reading	170
Progress check	248
Answers	265
Self evaluation	281
Public University (MA) 1391	287
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۱	289
Public University (MA) 1392	292
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۲	294
Public University (MA) 1393	296
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۳	298
Public University (MA) 1394	300
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۴	301
Public University (MA) 1395	303
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۵	304
Public University (MA) 1396	306
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۶	308
Public University (MA) 1397	310
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۷	311
Public University (MA) 1398	313
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۸	315
Public University (MA) 1399	317
پاسخنامه آزمون کارشناسی ارشد ۱۳۹۹	320
Public University (MA) 1400	322
پاسخنامه آزمون کارشناسی ارشد ۱۴۰۰	324
Public University (MA) 1401	327
پاسخنامه آزمون کارشناسی ارشد ۱۴۰۱	329
Public University (MA) 1402	332
پاسخنامه آزمون کارشناسی ارشد ۱۴۰۲	334
Public University (MA) 1403	336
پاسخنامه آزمون کارشناسی ارشد ۱۴۰۳	339
References	342

مدرسان
شریف

