

## CONTENTS

Preface	9
<b>Chapter I. Introduction to Information Technology (IT)</b>	<b>11</b>
1.1. Is Information Technology or Knowledge Technology?	12
1.2. What is Technology?	13
1.3. Key Technologies of Present and Future	14
1.4. Technological Change and Phases	15
1.5. Social Impact of Technological Changes	17
1.6. What is Information Technology (IT)?	19
1.7. Basic Concepts of Information Technology	19
1.8. Information Technology and Communications	23
1.9. Information Technology and Systems Approach	25
1.10. Information Technology on The Effects of Human Behavior	29
1.11. What Kind of Values that Information Technology Produces	31
1.12. What Kind of Opportunities That Information Technology Creates?	32
1.13. Importance and Impact of Information Technology	34
1.14. Digital Media Terms	35
<b>Chapter II. Information Technology</b>	<b>37</b>
2.1. What is a Computer? What are its Main Parts?	37
2.2. Classification of Computers	40
2.3. The History of Computers	42
2.4. Comparing Computer with the Human Brain	45
2.5. Computer Buying tips What to Watch?	47
2.6. Computer Software	48
2.7. Computer Operating System (OS)	49
2.8. Computer Programming Languages	51
2.9. Computer Application Software	52
2.10. Databases	54
2.11. Free Software	57
2.12. What is Linux?	59
2.13. What is Pardus Operating System	62
2.14. Computer Network Technology	62
2.15. Wireless Network Technology	65
2.16. ADSL Technology	70
2.17. VoIP Technology	73
2.18. Cloud Computing Technology	74
2.19. 3D Printers	76
<b>Chapter III. Internet Technologies</b>	<b>79</b>
3.1. What is the Internet?	79
3.2. A Brief History of the Internet	81
3.3. The Speed of Internet Spread and its Importance	83
3.4. Internet Literacy	88

3.5.	Internet-Related Terms	90
3.6.	How to Connect to the Internet	93
3.7.	Internet Research and Search Engines	94
3.8.	How Secure is the Internet?	95
3.9.	What is WEB?	96
3.10.	WEB Site Design	97
3.11.	HTML Programming Language	98
3.12.	How to Have a Web Site?	100
3.13.	Electronic Commerce (E-Commerce)	102
3.14.	Electronic Government (e-Government),	104
3.15.	The History of Internet in Turkey	113
3.16.	Internet Usage Statistics in Turkey	115
3.17.	How Should be Increased the Internet Usage in Turkey?	119
<b>Chapter IV. Information Technology at Home</b>		<b>121</b>
4.1.	Smart Home Automation	121
4.2.	Digital Security Systems	122
4.3.	Multimedia Home Computers	123
4.4.	Internet and Children	126
4.5.	Computer Operating Environment, Health and Safety	127
4.6.	Computer Viruses and Its Damages	128
4.7.	The Types and Features of Computer Virus	130
4.8.	How to Protect from Computer Virus	132
4.9.	Computer Anti-Virus Programs and Features	134
4.10.	What Should be Watched Out When Buying Computer? Anti-Virus Program	135
4.11.	MP3 / MP4 Players and CD / DVD Players	135
4.12.	Digital Camera and Camcorder	136
4.13.	Classic and Smart Mobile Phones	136
4.14.	Digital Media Terms	138
<b>Chapter V. Information Technology at Work</b>		<b>141</b>
5.1.	Information Technology and Business Competitiveness	142
5.2.	Information Technology and Business Management Factors	144
5.3.	Information Technology and Business Manager Functions	145
5.4.	Management of Information Systems (MIS)	148
5.5.	Information Technology and Employment	149
5.6.	Information Technology and Unemployment	151
5.7.	How to Choose Information Technology Systems?	153
<b>Chapter VI. Information Technology at School</b>		<b>155</b>
6.1.	What is Education and Teaching?	156
6.2.	Education and the Human Brain	158
6.3.	Process and Methods of Teaching	160
6.4.	Classic Instructional Technology and Systems	162
6.5.	Systems Approach in Education	164
6.6.	Instructional and Information Technology	165
6.7.	Information Technology Managed Instruction (ITMI)	167

6.8.	Information Technology Assisted Instruction (ITAI)	167
6.9.	Factors Affecting the Success of ITAI	170
6.10.	What Are the Benefits of ITAI?	174
6.11.	The Contribution of Internet to Education System	176
6.12.	Virtual (Online) and Distance Education	178
6.13.	Education System and Marketing	180
6.14.	Education System and the State	181
6.15.	Education System and Universities	182
6.16.	What is FATİH Project In Turkish Education System	186
<b>Chapter VII. Information Technology in Cities</b>		<b>191</b>
7.1.	Information Technologies That Affect City Governance	192
7.2.	Urban Information Systems (UIS)	193
7.3.	Municipal Information Systems (MIS)	196
7.4.	Electronic Municipality (e-Municipality)	197
7.5.	Transition of e-Municipality	205
7.6.	Municipal Wireless Network (MWN)	206
7.7.	Geographical Information Systems (GIS)	211
7.8.	City Security Management Systems - CSMS	216
7.9.	The Effects of Information Technology on Urban Life	219
7.10.	ICT Usage Survey in Municipalities	221
7.11.	Information City (IC)	233
<b>Chapter VIII. Information Society and Economy</b>		<b>237</b>
8.1.	Information Society	239
8.2.	Information-Workers Class	245
8.3.	Information Needs of People in Information Society	247
8.4.	Information Society and the Copyright Law	248
8.5.	Information Society and Digital Divide in World	249
8.6.	Information Economics (IE)	252
8.7.	The Main Sector of Information Economics	255
8.8.	The Contributions of Internet to Information Economy	257
8.9.	What Should be Done to Become Information Society and Information Economy?	258
<b>Chapter IX. Suggestions for Technology Policies</b>		<b>261</b>
	Epilogue	267
	Abbreviations	271
	Internet Resources	275
	Bibliography	277
	Brief CV	287