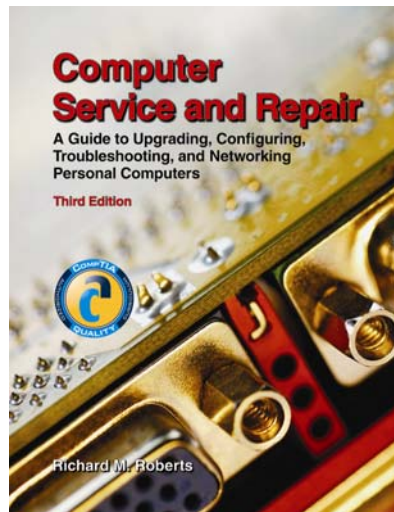




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Course: Computer Engineering Technology I
***Computer Service and Repair* © 2009**



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Textbook Title: Computer Service and Repair
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Comp # Obj #	Unit Titles / Competency and Objective Statements (The Learner will be able to:)	Correlating Page Numbers
A LEADERSHIP		
1.00	Demonstrate basic business meeting skills and goal setting	
1.01	Demonstrate basic business meeting skills	860–864, 868–870
1.02	Establish personal, organizational and career goals	913–931,
1.03	Discuss IT ethical and legal issues	625–626, 872
B COMPUTER HARDWARE (A+ CORE)		
2.00	Installation, Configuration, and Upgrading	
2.01	Identify the names, purpose, and characteristics of system modules	34–40, 117–154, 163–198, 209–244, 253–287, 297–329, 341–388, 401–488, 525–533, 716–717
2.02	Apply basic procedures for adding and removing field replaceable modules for desktop systems	198, 203–208, 239, 249–251, 270, 271, 365, 384–385, 429–430, 432–439, 454–456, 473–476, 481–484, 718, 728–734
2.03	Apply basic procedures for adding and removing field replaceable modules for portable systems	552–556
2.04	Apply procedures for altering IRQs, DMAs, and I/O addresses when installing and configuring devices	140–146, 657
2.05	Identify the names, purpose, and performance characteristics of standardized/common peripheral ports, associated cabling, and their connectors	29–33, 136–139, 302, 362, 366–374, 586–590
2.06	Identify proper procedures for installing and configuring common IDE devices	429–430, 454–456, 475–476, 481–484
2.07	Identify proper procedures for installing and configuring common SCSI devices	432–439
2.08	Demonstrate proper procedures for installing and configuring common peripheral devices	301–302, 306–307, 326–328, 496–500, 518–522, 586–587, 589–590
2.09	Explain procedures to optimize PC operations in specific situations	171–178, 283–285
2.10	Recognize the issues that must be considered when upgrading a PC	198, 255
3.00	Diagnosing and Troubleshooting	
3.01	Recognize common problems associated with each module and their symptoms, and identify steps to isolate and troubleshoot the problems	153–154, 237–239, 285–287, 303–304, 308–309, 359–360, 556–559, 595, 642–646
3.02	Describe basic troubleshooting procedures and tools, and how to elicit problem symptoms from customers	635–674
4.00	Preventive Maintenance, Safety, and Environmental	
4.01	Demonstrate the various types of preventive maintenance measures, products and procedures	303–304, 308–309, 360–361, 419–424, 492–493, 559–560, 620–621, 676–678
4.02	Demonstrate various safety measures and procedures	214, 216, 222, 342, 351, 353, 527

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4.03	Demonstrate environmental protection measures and procedures	244, 503–504, 526–527
5.00 Motherboard/Processors/Memory		
5.01	Distinguish between the popular CPU chips in terms of their basic characteristics	181–198
5.02	Identify the types of RAM (Random Access Memory), form factors, and operational characteristics	255–275
5.03	Identify the most popular type of motherboards, their components, and their architecture (for example, bus structures and power supplies)	120–140, 226–234 38–39, 149–152
5.04	Explain the purpose of CMOS (Complementary Metal-Oxide Semiconductor) memory, what it contains, and how and when to change its parameters	
6.00 Printers		
6.01	Identify printer technologies, interfaces and options/upgrades	485–504
6.02	Recognize common printer problems and techniques used to resolve them	504–510
7.00 Basic Networking		
7.01	Identify the common types of network cables, their characteristics and connectors	709–716
7.02	Identify basic networking concepts including how a network works	690–709, 716–723, 735–766, 770–775
7.03	Identify common technologies available for establishing Internet connectivity and their characteristics	777–800