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| **Learner Name:** |  | **Assessor:** | |  |
| **Centre Name:** |  | **Internal Verifier (if applicable):** | |  |
| **BCS ID / ULN:** |  |  | |  |
| **Unit Information Summary** | | | | |
| **Approximate Guided Learning Hours: 40** | | | **Unit Number: R/502/4211** | |
| **QCF Credit Value: 5** | | | **Learning Outcomes (Number): 4** | |
| **Examples of Context:**   * Re-configuring a PC after a new hard disk has been installed. | | | **Learning Materials Available:**  None for this unit | |
| **Suggested Assessment Methods:**  All ITQ units may be assessed using any method or combination of methods which clearly demonstrates that the learning outcomes and assessment criteria have been fully met   * Scenario * Coursework * Portfolio of Evidence – classroom or work-based * Practical Demonstration * Assignment * Task-based Controlled Assessment * Professional Discussion * Observation * Witness Statement | | |

| **Ofqual Learning Outcome** | | **Assessment Criteria** | **Examples of Content**  *The examples given are indicative of the learning content at each level and are not intended to form a prescriptive list for the purpose of assessment* | **Evidence Location** |
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| **1 Select and connect up a personal computer safely with associated hardware and storage media to meet needs** | 1.1 | Explain the reasons for choosing different system components and how to avoid any compatibility issues between hardware and software | *Compatibility issues: What problems can occur when hardware, software and operating systems are not compatible; why compatibility standards are needed* |  |
| 1.2 | Explain any health and safety issues associated with setting up an IT system | *Health and safety issues: Risks from hardware, electrical connection risks and guidelines, use and disposal of cleaning materials, handling equipment. Risks to self and others from using hardware; health and safety point of contact* |  |
| 1.3 | Explain the characteristics of IT systems that affect performance | *IT system performance: Processor speed, memory size, storage capacity, network capability; graphics; display adapter* |  |
| 1.4 | Select and connect up the components of an IT system safely, including any peripheral devices and storage media | *IT system components: Will vary according to the set up, for example: Personal computer, monitor, keyboard, mouse (or other pointing device)*  *Peripheral devices: Speakers, modem, scanner, games console, joystick; TV, data projector, white board; Plug and play devices; customised setup routines, printer and other device drivers*  *Storage media: Disk, CD/DVD, data/memory stick, media card, mobile device, removable hard drive; customised setup routines; backup media*  *Reasons for choosing storage media: Performance, capacity, accessibility, portability, security* |  |
| **2 Select and connect IT system to a communication service successfully to meet needs** | 2.1 | Explain the reasons for choosing a communication service |  |  |
| 2.2 | Explain what effect variations in data transmission speed may have | *Data transmission speed: Which combinations of hardware and software offer very fast or slower data transmission speeds; download capacity; how much speeds in transmitting, receiving and sending data may vary* |  |
| 2.3 | Select and connect communication hardware safely to an IT system | *Communication hardware: Router, modem, mobile data device, wireless router; cables, power supply; USB. parallel, serial connections* |  |
| 2.4 | Select and connect to a communication service from an IT system | *Communication service: Broadband, dial up, wireless, network, mobile device, ISP, IP configuration* |  |
| 2.5 | Explain the factors which influence choice of Internet Service Providers |  |  |
| **3 Install and configure operating system and application software for use** | 3.1 | Configure the user interface to meet needs | *User interface: Operating system, date, time, language settings; Set up administrator and user accounts; desktop shortcuts; customise start-up; memory usage; power management* |  |
| 3.2 | Explain what security precautions need to be addressed for the system to be used securely online by several users |  |  |
| 3.3 | Install, set up and configure virus protection and other security systems and software | *Security systems: Firewall, spyware, anti-spam software* |  |
| 3.4 | Explain the benefits and risks of using disk partitions or other backup locations |  |  |
| 3.5 | Establish a backup routine for data and system | *System backup: Disk partition, removable storage, disk or tape rotation, system restore points, physical location of backup* |  |
| 3.6 | Install, set up and configure application software to meet needs | *Set up files and software applications: Software licence; installation disks; manuals; download, customised settings; download software; map network drive; register software; custom installations* |  |
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| **4 Check that the IT system and communication service are working successfully** | 4.1 | Explain what system tests and communication tests are needed and why | *System tests: Hardware and software; Print test pages, check files are saved on storage media, open and close applications; open and close files; access network files and applications; Certificates and labelling; check printer drivers; de-frag, delete unwanted system files, check backup strategy, restore system files, restore data files*  *Communication tests: Send and receive test email, navigate to ISP website; ping IP address; check transmission speed* |  |
| 4.2 | Select and run suitable tests to make sure that the system and communication service are working successfully |  |  |
| 4.3 | Explain the range of help and troubleshooting facilities available to solve problems |  |  |
| 4.4 | Establish procedures for recovery in the event of system faults or failure | *Recovery procedures: Logs and records of system components and licensed software; Boot disk; system restore and backup* |  |
| 4.5 | Respond to faults and error messages and use help and troubleshooting facilities to determine and take appropriate action |  |  |

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| **Assessment Report** | | | | |
| **Assessor feedback / comments** (continue on additional sheet / assessment report if necessary) | | | | |
| **Internal Verifier actions / comments / feedback** | | | | |
| **Assessor signature:** |  | **Assessment date:** |  | **Reason for IV:**  **New Assessor**  **Random Sample**  **New Unit/Qualification**  **Other** |
| **IV signature:** |  | **IV date:** |  |