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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: K/502/4246** | |
| **QCF Credit Value: 5** | | | **Learning Outcomes (Number): 5** | |
| **Examples of Context:**   * Partitioning disks; * Identify and manage backup and storage procedures; * Adding memory; upgrade software. | | | **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 Keep computer hardware and software operating efficiently** | 1.1 | Explain the factors that should be taken into account when choosing an operating system | *Characteristics of operating systems: Cost, ease of use, compatibility with software, proprietary or open source; availability of support; additional features* |  |
| 1.2 | Take appropriate steps to protect computer hardware from loss or damage |  |  |
| 1.3 | Explain why routine fault-finding procedures are important | *Fault finding procedures: Recommended by the manufacturer, diagnostic tools and probes; maintain fault log* |  |
| 1.4 | Use an appropriate fault-finding procedure to routinely monitor hardware performance |  |  |
| 1.5 | Configure anti-virus and other security software | *Security software: Anti-virus, malware. Frequency; timing; updates, firewall settings* |  |
| 1.6 | Install and configure printers and other peripheral devices |  |  |
| 1.7 | Configure synchronisation and maintain security on remote access sessions |  |  |
| 1.8 | Configure a computer to present or display information to an audience |  |  |
| **2 Manage files to maintain and improve performance** | 2.1 | Explain why it is important to undertake file housekeeping of the information stored on computer systems and how it affects performance | *Information storage: Data files, folders, sub-folders, storage media; archives*  *File housekeeping: Naming and labelling conventions; organising files, folders and storage media; saving back-ups; deleting unwanted files; changing default settings for saving data; file and folder options; sharing and synchronising files; disk management* |  |
| 2.2 | Use file navigation software to organise files into an appropriate folder structure |  |  |
| **2 Manage files to maintain and improve performance** | 2.3 | Archive, backup and restore files and folders |  |  |
| 2.4 | Manage file and disk housekeeping so that information is secure and easy to find |  |  |
| 2.5 | Configure access to remote file systems |  |  |
| 2.6 | Distinguish between data and system file types |  |  |
| **3 Trouble-shoot and respond to IT system problems quickly and effectively** | 3.1 | Assess IT system problems, explain what causes them and how to respond to them and avoid similar problems in the future | *IT system problems: Program not responding, paper jam, storage full, error dialogue, virus threat, memory low; connection loss; hardware and software compatibility problems, system slow; intermittent errors; technically complex or serious errors; unrecoverable system failure* |  |
| 3.2 | Carry out contingency planning to recover from system failure and data loss |  |  |
| 3.3 | Monitor and record IT system problems to enable effective response | *Record problems: Error log, description, frequency of occurrence, severity; impact* |  |
| 3.4 | Monitor system settings and adjust when necessary | *System settings: Basic input/output settings (BIOS), memory usage, display settings, network settings, power usage* |  |
| 3.5 | Explain when and where to get expert advice | *Expert advice: Limits of own understanding and skills, help menus, manufacturer’s guidelines, how to follow advice, information needed by experts, where to get advice to deal with different hardware and software problems* |  |
| 3.6 | Help others to select and use appropriate resources to respond to IT system problems |  |  |
| 3.7 | Check that errors and problems have been resolved satisfactorily |  |  |
| **4 Plan and monitor the routine and non-routine maintenance of hardware and software** | 4.1 | Clarify the resources that will be needed to carry out maintenance |  |  |
| 4.2 | Develop a plan for the maintenance of IT hardware and software | *Maintenance plans: Finance, expertise, materials, equipment* |  |
| 4.3 | Monitor the implementation of maintenance plans, updating them where necessary |  |  |
| **5 Review and modify hardware and software to maintain performance** | 5.1 | Use appropriate techniques to maintain software for optimum performance | *Maintain software: Install software patches and upgrades, install and uninstall software, install operating system upgrades; install maintenance updates; administrative tools and procedures* |  |
| 5.2 | Clarify when and how to upgrade software | *Upgrade software: Benefits of upgrading, drawbacks of not upgrading, the need to check compatibility of software and hardware upgrades with other parts of the system, the importance of keeping up-to-date, return on investment* |  |
| 5.3 | Review and modify hardware settings to maintain performance |  |  |

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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:** |  |