Cambridge TECHNICALS LEVEL 3

IT

Cambridge TECHNICALS 2016

MAPPING GUIDE
Unit 18 Computer Systems

Version 1

INTRODUCTION

Prodigy are delighted to work with OCR, a progressive Awarding Organisation, who share the ambition of providing high-quality qualifications, learning solutions that are industry-led and reliable and valid assessment. The Cambridge Technicals in IT qualifications provide 'future-ready' skills for a learner to further their ambitions, whether that is in terms of further academic study, enter an apprenticeship or as a springboard to gaining employment.

Prodigy Learning (Prodigy) is an award-winning EdTech business providing digital skills certifications and learning solutions for a range of technologies including Adobe, Autodesk and Microsoft. Established in 2000, Prodigy now have offices in Dublin, London and Sydney. Having worked closely with Microsoft since 2000, Prodigy is a Microsoft Authorised Education Gold Partner and a MS Global Training Partner supporting academic institutions utilise Microsoft Imagine Academy, Microsoft certifications and other Microsoft Education solutions.

Historically, the UK has thrived on a rich research and technology base and has been at the forefront of global technology innovation. Enthusing young learners about following exciting careers in science, technology, engineering and mathematics (STEM) subjects is fundamental to maintaining this success. However, currently the UK has a widely acknowledged skills gap in the pipeline of talent studying computing-related disciplines. Therefore, providing high quality, engaging and relevant qualifications that equip learners with current technical knowledge and skills is essential to encourage more young people into the computing discipline, and moreover to ensure they progress to jobs in the sector.

5. Managing Devices

	5.1.1 Connect plug-and-play devices	5.1.2 connect and disconnect printers	5.1.3 install third-party software for devices	5.2.1 Understand disk types, security (encryption), storage device types (eSATA, USB, IEEE 1394, iSCSI, Infiniband), and storage drive types (basic, primary, extended, logical, dynamic disk, VHDs)	5.3. Understand printing devices: Understand local printers, network printers, print queues, print-to-file, and Internet printing	5.4.1 Understand video, audio, and infrared input devices
1.1.6 Computer hardware components - internal system unit components: VGA, DVI, DisplayPort, HDMI						X
1.1.7 Computer hardware components - internal system unit components: internal memory (e. RAM, ROM, cache)						X
1.1.8 Computer hardware components - internal system unit components: specialised cards (e.g. network, graphic cards, sound) functionality: Jackson structure chart						X
1.1.10 Computer hardware components - peripheral devices: output devices (e.g. monitor, printer, speakers)	X	X	X		X	
1.1.11 Computer hardware components - peripheral devices: input devices (e.g. camera/webcam, scanner, microphone, mobile devices)	X	X	X			
1.2.1 Storage - pen drives				X		
1.2.2 Storage - optical media				X		

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1.2.3 Storage - flash memory cards				X		
1.2.4 Storage - cloud				X		
1.2.5 Storage - portable and fixed drives				X		
1.2.6 Storage - DASD				X		
1.2.7 Storage - SAS				X		
1.2.8 Storage - SSD				X		
1.2.9 Storage - enterprise storage				X		
1.2.10 Storage - NAS				X		
1.2.11 Storage -SAN				X		
1.2.12 Storage -hybrid systems				X		
1.2.13 Storage -virtual tape systems				X		
1.2.15 Storage - advantages				X		
1.2.15 Storage - advantages				X		
1.2.16 - Storage - disadvantages				X		
1.2.17 Storage - performance factors (e.g. security, capacity, transfer rate)				X		

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6. Understanding operating system maintenance

	6.1.1 Configure System Restore; configure a recovery drive	6.1.2 configure recovery boot options such as Last Known Good and various Safe Mode options	6.1.3 recover files from OneDrive	6.2.1 Understand Disk Defragmenter	6.2.2 Disk Clean-up	6.2.3 Task Scheduler	6.2.4 System Information	6.3.1 Configure Windows Update options; implement Insider Preview, Current Branch, and Current Branch for Business scenarios	6.3.2 manage update history	6.3.3 roll back updates
3.3.1 Preventative maintenance - organisation, naming, deletion and archiving of files	X	X	X	X	X	X	X	X	X	X
3.3.2 Preventative maintenance - back-up procedures (e.g. data prior to upgrading computer system, storage of backup, system backup recovery)	X	X	X	X	X	X	X	X	X	X
3.3.3 Preventative maintenance - defragmentation				X	X					
4.2.1 Diagnostic software - memory diagnostic tools				X	X	X	X			
4.2.4 Diagnostic software - administrative tools	X	X	X	X	X	X	X	X	X	X
4.3.1 Benchmarking - Windows systems assessment tool				X	X	X	X			

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