

**Cambridge Technicals
IT**

Unit 1: Fundamentals of IT

Level 3 Cambridge Technical in IT
05838 – 05842/05877

Mark Scheme for January 2020

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.







This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

© OCR 2020

Annotations

Annotation	Meaning
	Tick – correct answer
	Cross – incorrect answer
	Plus – use for positives
	Minus – use for negatives
L1	Level 1
L2	Level 2
L3	Level 3
BOD	Benefit of doubt (This does count as a mark – so do not ‘tick’ as well)
^	Omission mark
V	Too vague
R	Repeat
 or 	Noted but no credit given

Question			Answer	Marks	Guidance
Section A					
1		A	Bluetooth	1	
2		A	record hardware faults	1	
3		D	Word processor	1	
4		D	DTP	1	
5		C	Teleconference	1	
6		A	Baseline	1	
7		A	ICMP	1	
8		B	Cloud	1	
9		C	MIS	1	
10		B	Group discussions	1	
11		B	Can do attitude	1	
12		D	Use of Information	1	
13		B	Hacking	1	
14		C	Lock	1	
15		C	Permissions	1	

Question		Answer	Marks	Guidance
16	(a)	<ul style="list-style-type: none"> • Touch screen(1st) to point and select / scroll/ resize (1) • Trackpad(1st) to point and select /scroll/ resize (1) • Keyboard(1st) to type/ input data (1) • Mouse (1st) to point and select (1) • Graphics tablet (1) to draw (1) • Scanner (1st) to convert hard copy to digital (1) • Any other valid response 	4	<p>Two marks per input device</p> <p>Accept drawing pad as graphics tablet 1st mark for the identification of the device 2nd mark for the description of device DNA description without identification</p> <p>Description must be specific to the device identified so generic answers such as navigate are TV</p>
	(b)	<ul style="list-style-type: none"> • Firewire (1) It has a transfer speed of 800Mbps (1) • SD Port (1) allows an SD card to be removed from camera and connected to the PC (1) 	2	<p>One mark for identification with a further mark for valid description.</p> <p>Accept SD card as BOD DNA USB</p>

Question		Answer	Marks	Guidance
	(c)	<p>Possible benefits</p> <ul style="list-style-type: none"> • Faster rendering/ processing <u>speeds</u> (1) as GPUs process large numbers of simple tasks well (1) • Increased computer performance (1) as GPU takes load from CPU/ as GPU frees up RAM • Better driver support (1) as GPU manufacturers release updates for latest OS and games (1) 	2	<p>One mark for identification with a further mark for valid description.</p> <p>DNA answers relating to improved screen resolution</p> <p>We are not looking for amount / size of files. It is the speed of processing files</p>
	(d)	<ul style="list-style-type: none"> • Wireless access point (1) to connect a wireless device to a wired network/ LAN/ WAN (1) • Network LAN adapters (1) to connect via ethernet cable (1) 	2	<p>One mark for identification with a further mark for valid description.</p>
	(e)	<ul style="list-style-type: none"> • 86 • F4 	2	
17	(a)	<ul style="list-style-type: none"> • Database • Spreadsheet 	1	<p>Accept brand names e.g. Access/ Excel/ Google Sheets/ Numbers</p> <p>These are answers drawn from productivity software NOT business software</p>
	(b)	<ul style="list-style-type: none"> • Backup (1st) any information/ data (1) to save from being lost in the future (1) • Anti-Virus (1st) Scans/ monitors the system (1) to decrease the chances of the system being infected from viruses (1) • Compression (1st) to save space (1) for future storing files (1) 	6	<p>DNA accept Firewalls</p>

Question		Answer	Marks	Guidance
	(c)	<ul style="list-style-type: none"> • Event/ system <u>Log</u>/ Viewer/ Anti-virus (1st) could be used to identify/ diagnose software/ hardware issues (1) • Installable software (1st) to identify the cause of the fault (1) • POST (Card) (1st) (which gives a series of beeps) to identify the faults (1) • Baseline (1st) to compare current performance against standard (1) 	4	<p><i>One mark for identification with a further mark for valid description</i></p> <p>DNA PING Test</p> <p>The event log could be taken from Anti-virus software identifying issues</p> <p>The description of the identified tool can be a description of what it does or what it is</p>

Question		Answer	Marks	Guidance
18	(a)	<ul style="list-style-type: none"> • File Server (1st) to store (1) data (1) • Print Server (1st) to manage (1) print jobs/ printing (1) • Database Server (1st) to store (1) client / project data (1) • Web Server (1st) to manage/ host (1) website/ pages (1) • Mail Server (1st) to manage/ send/ receive/ archive (1) emails (1) 	9	
	(b)*	<p>Possible benefits</p> <ul style="list-style-type: none"> • Expandable • Flexible to need • Management • Frees up physical space • Costs (equipment/ running costs) <p>Possible limitations</p> <ul style="list-style-type: none"> • Costs (hosting) • Access to own data • Fault with provider • Relies on internet • Security 	10	<p>Level 3 [7-10 marks] The learner has explained more than 1 benefit AND more than 1 limitation of cloud storage to GES in context.</p> <p>Subject specific terminology and knowledge will be clearly used to support and inform the explanations.</p> <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p>Level 2 [4-6 marks] The learner has described at least 1 benefit AND/OR 1 limitation of cloud storage.</p> <p>At the bottom of the mark band, the learner may describe generic aspects of a network type.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is for the most part relevant and supported by some evidence.</i></p> <p>Level 1 [1-3 marks] The learner has identified generic points in relation to cloud storage.</p> <p>Subject specific terminology may be limited or missing.</p>

Question			Answer	Marks	Guidance
					<p><i>The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.</i></p> <p>0 marks = Nothing worthy of credit.</p>
	(c)		<ul style="list-style-type: none"> • LAN 	1	One mark for identification
19	(a)		<ul style="list-style-type: none"> • Distraction (1st) with things moving in the factory (1) • Noise (1st) from the machinery in the factory (1) • Lack of concentration (1st) due to factory surroundings (1) 	4	One mark for identification with a further mark for valid description
	(b)		<ul style="list-style-type: none"> • Software Programmer/ Developer 	1	
	(c)		<ul style="list-style-type: none"> • Gain insight (1st) into industry trends (1) and latest developments (1) • Acquire knowledge (1st) shared (1) by other members (1) • Enables networking (1st) by putting professionals in touch (1) with other professionals (1) • Training for members (1st) which leads to increase career development (1) 	3	<p>One mark for identification with a further mark for valid description</p> <p>Award 1 mark only for a tangible benefit such as insurance/ email address/ magazine</p> <p>Read the whole answer and allow candidate the best mark</p> <p>Allow mix and match</p>
	(d)		<ul style="list-style-type: none"> • The company are reassured (1st) that the person is trained (1) • The company can identify expertise (1st) in certain areas (1) 	2	<p>The answers must be a benefit to GES NOT to the employee</p> <p>It is not about the experience it is about what the qualification provides</p>

Question		Answer	Marks	Guidance
20	(a)*	<p>Indicative content:</p> <p>Physical Security:</p> <ul style="list-style-type: none"> • Locks on rooms • Biometric entry /log in • RFID • Token <p>Cloud Security:</p> <ul style="list-style-type: none"> • 2 - step authentication • Firewall • Anti-spyware/ Virus • Username/password • Permissions • Encryption • Back up 	10	<p>Level 3 [7-10 marks] The learner has explained more than 1 security measure that could be used by GES on the physical server and the cloud. Subject specific terminology and knowledge will be clearly used to support and inform the explanations. <i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p>Level 2 [4-6 marks] The learner has described at least 1 security measure that could be used on the physical server AND/OR the cloud by GES. At the bottom of the mark band, the learner may describe generic aspects of a security measures. <i>There is a line of reasoning presented with some structure. The information presented is for the most part relevant and supported by some evidence.</i></p> <p>Level 1 [1-3 marks] The learner has identified generic points in relation to security measures that could be used by GES. Subject specific terminology may be limited or missing. <i>The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.</i></p> <p>0 marks = Nothing worthy of credit.</p>
	(b)	<ul style="list-style-type: none"> • Virus/ trojan (1) • Hacking/ unauthorised access (1) • Interception (1) • Data theft (1) 	2	Any 2 from the list for 1 marks each

OCR (Oxford Cambridge and RSA Examinations)
The Triangle Building
Shaftesbury Road
Cambridge
CB2 8EA

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998

Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations
is a Company Limited by Guarantee
Registered in England
Registered Office; The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA
Registered Company Number: 3484466
OCR is an exempt Charity

OCR (Oxford Cambridge and RSA Examinations)
Head office
Telephone: 01223 552552
Facsimile: 01223 552553

© OCR 2020

