# Cambridge Nationals Level 1/2 Information Technologies (IT) OCR J836

# **Unit R050:**

### IT in the Real World

# **Revision Checklist**

Exam Date:	
Exam Time:	
Exam Duration:	1 hour 30 minutes

### **External Assessment [Written Examination]**

### 70 Marks

### **Topic Areas to be assessed:**

1: Design tools

2: Human Computer Interface (HCI) in everyday life

3: Data and testing

4: Cyber-security and legislation

5: Digital communications

6: Internet of Everything (IoE)

### Performance Objectives to be assessed:

PO1: Recall knowledge and show understanding

PO2: Apply knowledge and understanding

PO3: Analyse and evaluate knowledge, understanding and performance

## **R050 Examination Command Words**

Word(s)	Students will
Analyse	<ul> <li>Separate or break down information into parts and identify their characteristics or elements</li> <li>Explain the pros and cons of a topic or argument and make reasoned comments</li> <li>Explain the impacts of actions using a logical chain of reasoning</li> </ul>
Annotate	<ul> <li>Add information, for example, to a table, diagram or graph until it is final</li> <li>Add all the needed or appropriate parts</li> </ul>
Calculate	<ul> <li>Get a numerical answer showing how it has been worked out</li> </ul>
Choose	Select an answer from options give
Circle	<ul> <li>Select an answer from options given</li> </ul>
Compare and contrast	<ul> <li>Give an account of the similarities and differences between two or more items or situations</li> </ul>
Complete	<ul><li>Add all the needed or appropriate parts</li><li>Add information, for example, to a table, diagram or graph until it is final</li></ul>
Create	<ul><li>Produce a visual solution to a problem (for example: a mind map, flowchart or visualisation)</li></ul>
Describe	<ul><li>Give an account including all the relevant characteristics, qualities or events</li><li>Give a detailed account of</li></ul>
Discuss	<ul> <li>Present, analyse and evaluate relevant points (for example, for/against an argument)</li> </ul>
Draw	Produce a picture or diagram
Evaluate	<ul> <li>Make a reasoned qualitative judgement considering different factors and using available knowledge/experience</li> </ul>
Explain	<ul> <li>Give reasons for and/or causes of</li> <li>Use the words or phrases such as 'because' or 'therefore' or 'this means that' in answers</li> </ul>
Fill in	<ul><li>Add all the needed or appropriate parts</li><li>Add information, for example, to a table, diagram or graph until it is final</li></ul>
Identify	<ul> <li>Select an answer from options given</li> <li>Recognise, name or provide factors or features</li> </ul>
Justify	Give good reasons for offering an opinion or reaching a conclusion
Label	<ul> <li>Add information, for example, to a table, diagram or graph until it is final</li> <li>Add all the necessary or appropriate parts</li> </ul>
Outline	Give a short account, summary or description
State	<ul><li>Give factors or features</li><li>Give short, factual answers</li></ul>

### **Topic Revised Key:**

D	Developing
S	Secure
M	Mastered

## **TA1: Design tools**

TA	Topic	D	S	M
1.1.	Types of design tools			
	Flow charts: Components			
	Flow charts: Type of software it can be created on			
	Flow charts: Advantages			
	Flow charts: Disadvantages			
	Mind map - Library: Components			
	Mind map - Library: Type of software it can be created on			
	Mind map - Library: Advantages			
	Mind map - Library: Disadvantages			
	Mind map – Tunnel timeline: Components			
	Mind map – Tunnel timeline: Type of software it can be created on			
	Mind map – Tunnel timeline: Advantages			
	Mind map – Tunnel timeline: Disadvantages			
	Mind map – Presentation: Components			
	Mind map – Presentation: Type of software it can be created on			
	Mind map – Presentation: Advantages			
	Mind map – Presentation: Disadvantages			
	Visualisation diagrams: Components			
	Visualisation diagrams: Type of software it can be created on			
	Visualisation diagrams: Advantages			
	Visualisation diagrams: Disadvantages			
	Wireframes: Components			
	Wireframes: Type of software it can be created on			
	Wireframes: Advantages			
	Wireframes: Disadvantages			
	Justify creating an original document using relevant design tools using software			
	Justify creating an original document using relevant design tools using sketches			

## TA2: Human Computer Interface (HCI) in everyday life

TA	Topic	D	S	M
2.1.	The purpose, importance and use of HCI in application areas			
	Know the purpose of HCI			
	Banking: Know why HCI is used in this application area			
	Banking: Know the importance of HCl applied to this application area			
	Banking: Advantages of the use of an HCI in this application area			
	Banking: Disadvantages of the use of an HCI in this application area			-
	Embedded Systems: Know why HCl is used in this application area			<del>                                     </del>
	Embedded Systems: Know the importance of HCl applied to this application area			
	Embedded Systems: Advantages of the use of an HCI in this application area			<del>                                     </del>
	Embedded Systems: Disadvantages of the use of an HCl in this application area			-
	Entertainment: Know why HCl is used in this application area			
	Entertainment: Know the importance of HCl applied to this application area			
	Entertainment: Advantages of the use of an HCI in this application area			
	Entertainment: Disadvantages of the use of an HCI in this application area			1
	Fitness: Know why HCl is used in this application area			
	Fitness: Know the importance of HCI applied to this application area			
	Fitness: Advantages of the use of an HCI in this application area			
	Fitness: Disadvantages of the use of an HCI in this application area			
	Home Appliances: Know why HCI is used in this application area			
	Home Appliances: Know the importance of HCI applied to this application area			
	Home Appliances: Advantages of the use of an HCI in this application area			
	Home Appliances: Disadvantages of the use of an HCI in this application area			
	Retail: Know why HCl is used in this application area			
	Retail: Know the importance of HCI applied to this application area			
	Retail: Advantages of the use of an HCI in this application area			
	Retail: Disadvantages of the use of an HCI in this application area			-
2.2.	Hardware considerations			
	Know the different display <b>types</b> that an HCl can be used on			
	Know the different display <b>sizes</b> that an HCl can be used on			
	The impact of display and resources (memory) on the HCI			
	The impact of display and resources ( <b>memory</b> ) on the HCI			
	Advantages of hardware considerations for using an HCI			
	Disadvantages of hardware considerations for using an HCI			
2.3.	Software considerations			
	Know how the HCI used on the <b>Windows</b> operating systems and software applications			
	will impact on the design			
	Know how the HCI used on the <b>Apple macOS</b> operating systems and software			
	applications will impact on the design			<u> </u>
	Know how the HCI used on the <b>Apple's iOS</b> operating systems and software			
	applications will impact on the design			
	Know how the HCI used on the <b>Android</b> operating systems and software applications			
	will impact on the design			
	Know how the HCI used on the <b>Chrome</b> operating systems and software applications			
	will impact on the design			
	Know how the HCI used on the <b>Ubuntu</b> operating systems and software applications			
	will impact on the design			
	Know how the HCI used on the <b>Linux</b> operating systems and software applications will			
	impact on the design			
	Know how the HCI used on the <b>Unix</b> operating systems and software applications will			
	impact on the design			
	Know how the HCI used on the digital platform, <b>database</b> , will impact on the design			

TA	Topic	D	S	M
	Know how the HCI used on the digital platform, mobile app, will impact on the design			
	Know how the HCI used on the digital platform, spreadsheet, will impact on the			
	design			
	Know how the HCI used on the digital platform, website, will impact on the design			
2.4.	Software considerations			
	Know how a user will interact with the HCI using gesture			
	Advantages of using <b>gesture</b> as an interaction method			
	Disadvantages of using <b>gesture</b> as an interaction method			
	Know how a user will interact with the HCI using a keyboard			
	Advantages of using a <b>keyboard</b> as an interaction method			
	Disadvantages of using a <b>keyboard</b> as an interaction method			
	Know how a user will interact with the HCI using a mouse			
	Advantages of using a mouse as an interaction method			
	Disadvantages of using a <b>mouse</b> as an interaction method			
	Know how a user will interact with the HCI using touch			
	Advantages of using touch as an interaction method			
	Disadvantages of using touch as an interaction method			
	Know how a user will interact with the HCI using voice			
	Advantages of using <b>voice</b> as an interaction method			
	Disadvantages of using <b>voice</b> as an interaction method			

## **TA3: Data and testing**

TA	Topic	D	S	M
3.1.	Information and data			
	What data is			
	What information is			
	Know the difference between data and information			
	How data is converted to information			
	The relationship between data and information			
3.2.	Data use			
3.2.1.	Use of data types in different contexts			
	Alphanumeric: Characteristics			
	Alphanumeric: How it can be used			
	Alphanumeric: Assesse the suitability and justify its use in a given context			
	Boolean: Characteristics			
	Boolean: How it can be used			
	Boolean: Assess the suitability and justify its use in a given context			
	Date: Characteristics			
	Date: How it can be used			
	Date: Assess the suitability and justify its use in a given context			
	Numeric – Currency: Characteristics			
	Numeric – Currency: How it can be used			
	Numeric – Currency: Assess the suitability and justify its use in a given context			
	Numeric – Decimal: Characteristics			
	Numeric – Decimal: Characteristics  Numeric – Decimal: How it can be used			
	Numeric – Decimal: Now it can be used  Numeric – Decimal: Assess the suitability and justify its use in a given context			
	Numeric – Integer: Characteristics			
	Numeric – Integer: Characteristics  Numeric – Integer: How it can be used			
	Numeric – Integer: Assess the suitability and justify its use in a given context			
	Numeric – Percentages: Characteristics			
	Numeric – Percentages: Characteristics  Numeric – Percentages: How it can be used			
	Numeric – Percentages: Assess the suitability and justify its use in a given context			
	Numeric – Real: Characteristics			
	Numeric – Real: How it can be used			
	Numeric – Real: Assess the suitability and justify its use in a given context <b>Text:</b> Characteristics			
	Text: How it can be used			
2.2.2	Text: Assess the suitability and justify its use in a given context  The difference between validation and verification			
3.2.2.				
	Know the purposes of validation			
	The different roles of validation			
	Know the purposes of <b>verification</b>			
	The different roles of verification			
3.2.3.	Data validation tools			
	Data type check: Purpose			<u> </u>
	Data type check: How it can reduce user errors			<u> </u>
	Format check: Purpose			<del>                                     </del>
	Format check: How it can reduce user errors			
	Input mask: Purpose			<u> </u>
	Input mask: How it can reduce user errors		1	<del>                                     </del>
	Length check: Purpose			<u> </u>
	Length check: How it can reduce user errors			
	Limited choice – Drop down list: Purpose			

TA	Topic	D	S	M
	Limited choice – Drop down list: How it can reduce user errors			
	Limited choice – Radio buttons: Purpose			
	Limited choice – Radio buttons: How it can reduce user errors			
	Limited choice – Tick list: Purpose			
	Limited choice – Tick list: How it can reduce user errors			
	Lookup: Purpose			
	Lookup: How it can reduce user errors			
	Presence check: Purpose			
	Presence check: How it can reduce user errors			
	Range check: Purpose			1
	Range check: How it can reduce user errors			1
3.2.4.	Data verification tools			
	Double entry: Purpose			
	Double entry: How it can reduce user errors			+
	Manual checking: Purpose			
	Manual checking: How it can reduce user errors			-
3.3.	Data collection methods			
٠.٠.	Know the different types of <b>primary</b> data collection methods			
	Know the different types of <b>secondary</b> data collection methods			
	Email: Purpose			-
	•			-
	Email: Advantages			
	Email: Disadvantages			-
	Email: Assess the suitability and justify its use in a given context			1
	Interview: Purpose			
	Interview: Advantages			
	Interview: Disadvantages			
	Interview: Assess the suitability and justify its use in a given context			-
	Online questionnaire and survey: Purpose			
	Online questionnaire and survey: Advantages			
	Online questionnaire and survey: Disadvantages			
	Online questionnaire and survey: Assess the suitability and justify its use in a given			
	context			
	Book: Purpose			
	Book: Advantages			
	Book: Disadvantages			
	Book: Assess the suitability and justify its use in a given context			
	Government statistics: Purpose			
	Government statistics: Advantages			
	Government statistics: Disadvantages			
	Government statistics: Assess the suitability and justify its use in a given context			
	Magazine: Purpose			
	Magazine: Advantages			
	Magazine: Disadvantages			
	Magazine: Assess the suitability and justify its use in a given context			
	Website: Purpose			
	Website: Advantages			
	Website: Disadvantages			
	Website: Assess the suitability and justify its use in a given context			
3.4.	Storage of collected data			
J•	Logical storage location: Type			
	Logical storage location: Advantages			
	Logical storage location: Advantages  Logical storage location: Disadvantages			
	Cloud: Characteristics			
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TA	Topic	D	S	M
	Cloud: Advantages			
	Cloud: Disadvantages			
	Physical storage locations: Types			
	Physical storage locations: Advantages			
	Physical storage locations: Disadvantages			
	Internal (physical) storage devices: Types			
	Internal (physical) storage devices: Advantages			
	Internal (physical) storage devices: Disadvantages			
	Primary hard drive: Characteristics			
	Primary hard drive: Advantages			
	Primary hard drive: Disadvantages			
	Network drive: Characteristics			
	Network drive: Advantages			
	Network drive: Disadvantages			
	External (physical) storage devices: Types			
	External (physical) storage devices: Advantages			
	External (physical) storage devices: Disadvantages			
	Portable external Hard Drive Disc (HDD): Characteristics			
	Portable external Hard Drive Disc (HDD): Advantages			
	Portable external Hard Drive Disc (HDD): Disadvantages			
	Portable Solid-State Drive (SSD): Characteristics			
	Portable Solid-State Drive (SSD): Advantages			
	Portable Solid-State Drive (SSD): Advantages  Portable Solid-State Drive (SSD): Disadvantages			
	Network-attached Storage (NAS) device: Characteristics			
	<u> </u>			
	Network-attached Storage (NAS) device: Advantages			
	Network-attached Storage (NAS) device: Disadvantages  Portable USB flash drives: Characteristics			
	Portable USB flash drives: Advantages			
	Portable USB flash drives: Disadvantages			
	Portable wireless drives: Characteristics			
	Portable wireless drives: Advantages			+
	Portable wireless drives: Disadvantages			
3.5.	Application of testing to a range of contexts			
3.5.1.	Importance and purpose of testing			
	Know why testing is needed			
	The effects of not testing the final product			
	Advantages of testing			
	Disadvantages of testing			
3.5.2.	Test data			
	Know the types of test data			
	Extreme: What it is			
	Extreme: Role during testing			
	Invalid (Erroneous): What it is			
	Invalid (Erroneous): Role during testing			
	Valid: What it is			
	Valid: Role during testing			
3.5.3.	Types of testing			
	Know the types of testing			
	Technical testing: What it is			
	Technical testing: What tests can be used			
	Technical testing: Advantages			
	reclinical testing. Navaritages			
	Technical testing: Disadvantages			

TA	Topic	D	S	M
	User testing: What tests can be used			
	User testing: Advantages			
	User testing: Disadvantages			

## **TA4: Cyber-security and legislation**

TA	Topic	D	S	M
4.1.	Threats			
	Denial of Service (DoS): Definition			
	Denial of Service (DoS): Why this threat is used by hackers			
	Denial of Service (DoS): How the threat can occur			
	Denial of Service (DoS): How the threat works			
	Denial of Service (DoS): How to mitigate			
	Types of hacking			
	Black Hat Hacking: Definition			
	Black Hat Hacking: Why this threat is used by hackers			
	Black Hat Hacking: How the threat can occur			
	Black Hat Hacking: How the threat works			1
	Black Hat Hacking: How to mitigate			1
	Grey Hat Hacking: Definition			+
	Grey Hat Hacking: Why this threat is used by hackers			+
	Grey Hat Hacking: How the threat can occur			+
	Grey Hat Hacking: How the threat works			-
	Grey Hat Hacking: How to mitigate			
	White Hat Hacking: Definition			<del>                                     </del>
	White Hat Hacking: Why this threat is used by hackers			+
	White Hat Hacking: How the threat can occur			
	White Hat Hacking: How the threat works			-
	White Hat Hacking: How to mitigate			
	Types of <b>malware</b>			
	Adware: Definition			<del>                                     </del>
				1
	Adware: Why this threat is used by hackers  Adware: How the threat can occur			+
	Adware: How the threat can occur Adware: How the threat works			-
	Adware: How to mitigate			1
	Botnet: Definition			1
	Botnet: Why this threat is used by hackers			-
	Botnet: How the threat can occur			-
	Botnet: How the threat works			
	Botnet: How to mitigate			-
	Ransomware: Definition			
	Ransomware: Why this threat is used by hackers			
	Ransomware: How the threat can occur			
	Ransomware: How the threat works			<u> </u>
	Ransomware: How to mitigate			<u> </u>
	Spyware: Definition			
	Spyware: Why this threat is used by hackers			-
	Spyware: How the threat can occur			
	Spyware: How the threat works			
	Spyware: How to mitigate			
	Trojan Horse: Definition			
	Trojan Horse: Why this threat is used by hackers			
	Trojan Horse: How the threat can occur			1
	Trojan Horse: How the threat works			
	Trojan Horse: How to mitigate			
	Virus: Definition			
	Virus: Why this threat is used by hackers			L

TA	Topic	D	S	M
	Virus: How the threat can occur			
	Virus: How the threat works			
	Virus: How to mitigate			
	Worm: Definition			
	Worm: Why this threat is used by hackers			
	Worm: How the threat can occur			
	Worm: How the threat works			
	Worm: How to mitigate			
	Types of social engineering			
	Baiting: Definition			
	Baiting: Why this threat is used by hackers			
	Baiting: How the threat can occur			
	Baiting: How the threat works			
	Baiting: How it can be used to gather data and information			
	Baiting: How to mitigate			
	Phishing: Definition			
	Phishing: Why this threat is used by hackers			
	Phishing: How the threat can occur			
	Phishing: How the threat can occur			
	Phishing: How it can be used to gather data and information			
	Phishing: How to mitigate			
	Pretexting: Definition			
	Pretexting: Why this threat is used by hackers			
	Pretexting: How the threat can occur			
	Pretexting: How the threat works			
	Pretexting: How it can be used to gather data and information			
	Pretexting: How to mitigate			
	Quid Pro Quo: Definition			
	Quid Pro Quo: Why this threat is used by hackers			
	Quid Pro Quo: How the threat can occur			
	Quid Pro Quo: How the threat works			
	Quid Pro Quo: How it can be used to gather data and information			
	Quid Pro Quo: How to mitigate			
	Scareware: Definition			
	Scareware: Why this threat is used by hackers			
	Scareware: How the threat can occur			
	Scareware: How the threat works			
	Scareware: How it can be used to gather data and information			
	Scareware: How to mitigate			
	Shoulder Surfing: Definition			
	Shoulder Surfing: Why this threat is used by hackers			
	Shoulder Surfing: How the threat can occur			
	Shoulder Surfing: How the threat works			
	Shoulder Surfing: How it can be used to gather data and information			
	Shoulder Surfing: How to mitigate			
4.2.	The impacts of a cyber-security attack on individuals and/or organisations			
	Know the impacts of a cyber-security attack on individuals and/or organisations			
	Data destruction: What it is			
	Data destruction: How it can affect an individual and/or organisations			1
	Data manipulation: What it is			
	Data manipulation: How it can affect an individual and/or organisations			
		-	1	<b>†</b>
	Data modification: What it is			

TA	Topic	D	S	M
	Data theft – in transit and at rest: What it is			
	Data theft – in transit and at rest: How it can affect an individual and/or organisations			
	Denial of Service (DoS) to authorised users: What it is			
	Denial of Service (DoS) to authorised users: How it can affect an individual and/or			
	organisations			
	Identity theft: What it is			
	Identity theft: How it can affect an individual and/or organisations			
4.3.	Prevention measures			
	Know the types of <b>physical</b> prevention measures			
	Biometric devices: How it works			
	Biometric devices: How it keeps data and devices secure			
	Biometric devices: How it can be used to mitigate against security risks			
	Firewalls (physical): How it works			
	Firewalls (physical): How it keeps data and devices secure			
	Firewalls (physical): How it can be used to mitigate against security risks			
	Keypads: How it works			
	Keypads: How it keeps data and devices secure			
	Keypads: How it can be used to mitigate against security risks			
	Radio-frequency Identification (RFID): How it works			
	Radio-frequency Identification (RFID): How it keeps data and devices secure			
	Radio-frequency Identification (RFID): How it can be used to mitigate against security			
	risks			
	Secure backups (physical): How it works			
	Secure backups (physical): How it keeps data and devices secure			
	Secure backups (physical): How it can be used to mitigate against security risks			
	Know the types of logical prevention measures			
	Access rights and permissions: How it works			
	Access rights and permissions: How it keeps data and devices secure			
	Access rights and permissions: How it can be used to mitigate against security risks			
	Anti-virus/malware software: How it works			
	Anti-virus/malware software: How it keeps data and devices secure			
	Anti-virus/malware software: How it can be used to mitigate against security risks			
	Two-Factor Authentication (2FA): How it works			
	Two-Factor Authentication (2FA): How it keeps data and devices secure			
	Two-Factor Authentication (2FA): How it can be used to mitigate against security risks			
	Encryption: How it works			
	Encryption: How it keeps data and devices secure			
	Encryption: How it can be used to mitigate against security risks			
	Firewalls (logical): How it works			
	Firewalls (logical): How it keeps data and devices secure			
	Firewalls (logical): How it can be used to mitigate against security risks			
	Secure backups (logical): How it works			
	Secure backups (logical): How it keeps data and devices secure			
	Secure backups (logical): How it can be used to mitigate against security risks			
	Usernames and passwords: How it works			
	Usernames and passwords: How it keeps data and devices secure			
	Usernames and passwords: How it can be used to mitigate against security risks			
	Know the methods of secure destruction of data			
	Data erasure: How it works			
	Data erasure: How it keeps data and devices secure			
	Data erasure: How it can be used to mitigate against security risks			
	Data sanitation: How it works			
	Data sanitation: How it keeps data and devices secure			
<u>I</u>	<u> </u>			

TA	Topic	D	S	M
	Data sanitation: How it can be used to mitigate against security risks			
	Magnetic wipe: How it works			
	Magnetic wipe: How it keeps data and devices secure			
	Magnetic wipe: How it can be used to mitigate against security risks			
	Physical destruction: How it works			
	Physical destruction: How it keeps data and devices secure			
	Physical destruction: How it can be used to mitigate against security risks			
4.5.	Legislation related to the use of IT systems			
	Identify the <b>legislations</b> related to the use of IT systems			
	Computer Misuse Act: Purpose			
	Computer Misuse Act: How/what is required of individuals/businesses to comply with			
	each area of the legislation			
	Computer Misuse Act: The implications of the legislation for data and information			
	Computer Misuse Act: The implications of the legislation for individuals			
	Computer Misuse Act: The implications of the legislation for organisations			
	Computer Misuse Act: How the legislation can be used when dealing with cyber-			
	security issues			
	Computer Misuse Act: Any recent changes in the Act that are relevant to the IT sector			
	Copyright, Designs and Patents Act: Purpose			
	Copyright, Designs and Patents Act: How/what is required of individuals/businesses to			
	comply with each area of the legislation			
	Copyright, Designs and Patents Act: The implications of the legislation for data and			
	information			
	Copyright, Designs and Patents Act: The implications of the legislation for individuals			
	Copyright, Designs and Patents Act: The implications of the legislation for			
	organisations			
	Copyright, Designs and Patents Act: How the legislation can be used when dealing			
	with cyber-security issues			
	Copyright, Designs and Patents Act: Any recent changes in the Act that are relevant to			
	the IT sector			
	Data Protection Act: Purpose			
	Data Protection Act: How/what is required of individuals/businesses to comply with			
	each area of the legislation			
	Data Protection Act: The implications of the legislation for data and information			
	Data Protection Act: The implications of the legislation for individuals			
	Data Protection Act: The implications of the legislation for organisations			
	Data Protection Act: How the legislation can be used when dealing with cyber-security			
	issues			
	Data Protection Act: Any recent changes in the Act that are relevant to the IT sector			
	Freedom of Information Act: Purpose			
	Freedom of Information Act: How/what is required of individuals/businesses to			
	comply with each area of the legislation			
	Freedom of Information Act: The implications of the legislation for data and			
	information			
	Freedom of Information Act: The implications of the legislation for individuals			
	Freedom of Information Act: The implications of the legislation for organisations			+-+
	Freedom of Information Act: The implications of the legislation for organisations  Freedom of Information Act: How the legislation can be used when dealing with			+-+
	cyber-security issues			
	Freedom of Information Act: Any recent changes in the Act that are relevant to the IT			+
	sector			
	Health & Safety at Work Act: Purpose			+
	Health & Safety at Work Act: How/what is required of individuals/businesses to			+
	comply with each area of the legislation			
	בטוויףוץ שונוו במנוו מובמ טו נווב ובצואמנוטוו	]	<u> </u>	

TA	Topic	D	S	M
	Health & Safety at Work Act: The implications of the legislation for data and information			
	Health & Safety at Work Act: The implications of the legislation for individuals			
	Health & Safety at Work Act: The implications of the legislation for organisations			
	Health & Safety at Work Act: How the legislation can be used when dealing with cyber-security issues			
	Health & Safety at Work Act: Any recent changes in the Act that are relevant to the IT			
	sector			

# **TA5: Digital communications**

TA	Topic	D	S	M
5.1.	Types			
	Know the types of digital communication			
	Audio: Purpose			
	Audio: Advantages			
	Audio: Disadvantages			
	Audio: Assess the suitability and justify the use of this digital communication to a			
	given context			
	Collaboration Tools: Purpose			
	Collaboration Tools: Advantages			
	Collaboration Tools: Disadvantages			<u> </u>
	Collaboration Tools: Assess the suitability and justify the use of this digital			<del>                                     </del>
	communication to a given context			
	Leaflet: Purpose			
	Leaflet: Advantages			<u> </u>
	Leaflet: Disadvantages			-
	Leaflet: Assess the suitability and justify the use of this digital communication to a			1
	given context			
	Infographics: Purpose			+
	Infographics: Advantages			+
	Infographics: Disadvantages			+
	Infographics: Assess the suitability and justify the use of this digital communication to			
	a given context			
	Newsletters: Purpose			
	Newsletters: Advantages			
	Newsletters: Disadvantages			
	Newsletters: Assess the suitability and justify the use of this digital communication to			
	a given context			
	Presentations: Purpose			-
	Presentations: Advantages			-
	Presentations: Disadvantages			
	Presentations: Assess the suitability and justify the use of this digital communication			
	to a given context			
	Reports: Purpose			
	Reports: Advantages			
	Reports: Disadvantages			
	Reports: Assess the suitability and justify the use of this digital communication to a			
	given context			
	Social Media: Purpose			
	Social Media: Advantages			
	Social Media: Disadvantages			
	Social Media: Assess the suitability and justify the use of this digital communication to			
	a given context			
	Video: Purpose			
	Video: Advantages			
	Video: Disadvantages			
	Video: Assess the suitability and justify the use of this digital communication to a			1
	given context			
	Voice over Internet Protocol (VoIP): Purpose			1
	Voice over Internet Protocol (VoIP): Advantages			
	Voice over Internet Protocol (VoIP): Disadvantages			<del>                                     </del>
	voice over internet i rotocor (voir ). Disauvantages	1	1	<u> </u>

TA	Topic	D	S	M
	Voice over Internet Protocol (VoIP): Assess the suitability and justify the use of this			
	digital communication to a given context			
	Websites: Purpose			
	Websites: Advantages			
	Websites: Disadvantages			
	Websites: Assess the suitability and justify the use of this digital communication to a			
	given context			
5.2.	Software			
	Know the different types of applications which can be used on PC, Macs, and mobile			
	devices			
	Desktop Publishing (DTP): Characteristics used to create digital communications			
	Desktop Publishing (DTP): Assess software to meet user requirements to a given			
	context			
	Database: Characteristics used to create digital communications			
	Database: Assess software to meet user requirements to a given context			
	Word Processor: Characteristics used to create digital communications			
	Word Processor: Assess software to meet user requirements to a given context			
	Presentation: Characteristics used to create digital communications			
	Presentation: Assess software to meet user requirements to a given context			
	Spreadsheet: Characteristics used to create digital communications			
	Spreadsheet: Assess software to meet user requirements to a given context			
5.3.	Digital Devices			
3.3.	Know the different types of digital devices			
	Smartphone: Characteristics			
	·			
	Smartphone: Assess the suitability of the digital device to a given context  Smart TV: Characteristics			
	Smart TV: Assess the suitability of the digital device to a given context			
	PC/Laptop: Characteristics			
	PC/Laptop: Assess the suitability of the digital device to a given context			
	Tablet: Characteristics			
	Tablet: Assess the suitability of the digital device to a given context			
	Smartboard: Characteristics			
	Smartboard: Assess the suitability of the digital device to a given context			
5.4.	Distribution Channels			
5.4.1.	Types of distribution channel			
	Know the different types of distribution channels			
	Cloud: Characteristics			
	Cloud: Advantages			
	Cloud: Disadvantages			
	Cloud: Assess and justify the suitability of the distribution channel applied to a given			
	context			
	Email: Characteristics			
	Email: Advantages			
	Email: Disadvantages			
	Email: Assess and justify the suitability of the distribution channel applied to a given			
	context			
	Messaging: Characteristics			
	Messaging: Advantages			
	Messaging: Disadvantages			
	Messaging: Assess and justify the suitability of the distribution channel applied to a			
	given context			
	Mobile Apps: Characteristics			
	Mobile Apps: Advantages			1

TA	Topic	D	S	M
	Mobile Apps: Disadvantages			
	Mobile Apps: Assess and justify the suitability of the distribution channel applied to a			
	given context			
	Multimedia: Characteristics			
	Multimedia: Advantages			
	Multimedia: Disadvantages			
	Multimedia: Assess and justify the suitability of the distribution channel applied to a			
	given context			
	VoIP: Characteristics			
	VoIP: Advantages			
	VoIP: Disadvantages			
	VoIP: Assess and justify the suitability of the distribution channel applied to a given			
	context			
	Websites: Characteristics			
	Websites: Advantages			
	Websites: Disadvantages			
	Websites: Assess and justify the suitability of the distribution channel applied to a			
	given context			
5.4.2.	Distribution channel connectivity			
	Know the different types of distribution channel connectivity			
	4G/5G: Characteristics			
	4G/5G: Advantages			
	4G/5G: Disadvantages			
	4G/5G: Assess the suitability of the connectivity method applied to a given context			
	Bluetooth: Characteristics			
	Bluetooth: Advantages			
	Bluetooth: Disadvantages			
	Bluetooth: Assess the suitability of the connectivity method applied to a given context			
	Mobile Wi-Fi Hotspots: Characteristics			
	Mobile Wi-Fi Hotspots: Advantages			
	Mobile Wi-Fi Hotspots: Disadvantages			
	Mobile Wi-Fi Hotspots: Assess the suitability of the connectivity method applied to a			-
	given context			
	Wi-Fi: Characteristics			-
	Wi-Fi: Advantages			-
	Wi-Fi: Disadvantages			-
	Wi-Fi: Assess the suitability of the connectivity method applied to a given context			-
	Wired: Characteristics			
	Wired: Advantages			
	Wired: Advantages Wired: Disadvantages			
	Wired: Disadvantages  Wired: Assess the suitability of the connectivity method applied to a given context			
5.5.	Audience demographics			
J.J.	Know the different types of audience demographics			
	Assess the suitability of the digital communication, distribution channel and			+
	connectivity linked to the audience demographic: Accessibility			
		1	1	
	Assess the suitability of the digital communication, distribution channel and			
	Connectivity linked to the audience demographic: <b>Age</b> Assess the suitability of the digital communication, distribution channel and			_
	connectivity linked to the audience demographic: <b>Gender</b>			
	Assess the suitability of the digital communication, distribution channel and			
	connectivity linked to the audience demographic: Location		1	<u> </u>

# **TA6: Internet of Everything (IoE)**

TA	Topic	D	S	M
6.1.	Use of IoE			
	Know what is meant by the <b>IoE</b>			
	Know how the <b>World Wide Web (WWW) and the Internet</b> are used in the use of the IoE			
	Know the <b>four pillars</b> of the IoE			
	Understand the interaction between the four pillars of the IoE			
	Know about IoE digital interactivity: <b>Device to device</b>			
	Know about IoE digital interactivity: <b>Human to device</b>			
	How devices can be <b>tailored</b> to meet the needs of end users			
	Up to date with emerging IoE related technologies			
6.2.	Application areas in everyday life			
	Energy Management: Purpose of this IoE application area			
	Energy Management: Advantages			
	Energy Management: Disadvantages			
	Energy Management: Assess the suitability of the use of IoE in this application area			
	Energy Management: Security issues			
	Health: Purpose of this IoE application area			
	Health: Advantages			
	Health: Disadvantages			
	Health: Assess the suitability of the use of IoE in this application area			
	Health: Security issues			
	Manufacturing: Purpose of this IoE application area			
	Manufacturing: Advantages			
	Manufacturing: Disadvantages			
	Manufacturing: Assess the suitability of the use of IoE in this application area			
	Manufacturing: Security issues			
	Military/Emergency Services: Purpose of this IoE application area			
	Military/Emergency Services: Advantages			
	Military/Emergency Services: Disadvantages			
	Military/Emergency Services: Assess the suitability of the use of IoE in this application			
	area			
	Military/Emergency Services: Security issues			
	Smart Devices – Business: Purpose of this IoE application area			
	Smart Devices – Business: Advantages			
	Smart Devices – Business: Disadvantages			
	Smart Devices – Business: Assess the suitability of the use of IoE in this application			
	area			
	Smart Devices – Business: Security issues			
	Smart Devices – Home: Purpose of this IoE application area			
	Smart Devices – Home: Advantages			
	Smart Devices – Home: Disadvantages			
	Smart Devices – Home: Assess the suitability of the use of IoE in this application area			
	Smart Devices – Home: Security issues			
	Smart Devices – Personal: Purpose of this IoE application area			
	Smart Devices – Personal: Advantages			
	Smart Devices – Personal: Disadvantages			
	Smart Devices – Personal: Assess the suitability of the use of IoE in this application			
	area			
	Smart Devices – Personal: Security issues			<u> </u>
	Transport: Purpose of this IoE application area			<u> </u>

TA	Topic	D	S	M
	Transport: Advantages			
	Transport: Disadvantages			
	Transport: Assess the suitability of the use of IoE in this application area			
	Transport: Security issues			