The Association of Business Executives

NQF

Introduction to the Word of Computers

Mark Scheme

Unit Title:	Introduction to the Word of Computers
Unit Code:	2.02 IWC
Session:	June 2015

Question 1

(a) A friend of yours who knows very little about PCs wants to buy one. They think they will use a PC for creating letters, sending e-mails, ordering products online and streaming television and movies.
Describe to them the components of a modern personal computer system and give an appropriate specification that would meet your friend's requirements. **(9 marks)**

Specification element name 1 mark, element description 1 mark and corresponding suitable value 1 mark e.g.
Processor (1 mark) - like the brain of the computer (1 mark), 2.5GHz + (1 mark)
Memory (1 mark) - the temporary storage used when processing instructions (1 mark), 4GB + (1 mark)
Hard drive (1 mark) - stores the programs and files (1 mark), 500 GB + (1 mark)

Maximum Marks for (a)   **9 marks**

(b) Give three examples of peripherals that your friend would need to get the most out of their new PC. **(3 marks)**

Any 3 suitable examples e.g.

Keyboard	1 mark
Mouse/trackball/trackpad/other pointing device	1 mark
Monitor/data projector	1 mark
Printer	1 mark
Scanner	1 mark
Webcam	1 mark
Microphone	1 mark
Speakers	1 mark
Wireless router	1 mark

Maximum Marks for (b)   **3 marks**
Total Maximum Marks for Q1   **12 marks**

Question 2

(a) [2.2] State four examples of software used in a typical office. **(4 marks)**

Any 4 suitable examples e.g.

E-mail management	1 mark
Word processing	1 mark
Spreadsheet	1 mark
Presentation	1 mark
Browser	1 mark
Desktop publishing	1 mark
Database	1 mark
Accounting	1 mark

Allow names of specific software e.g. Microsoft Excel, Sage etc. with 1 mark per different type of software but no additional marks for different examples of the same type of software e.g. Microsoft Outlook and Mozilla Thunderbird

(b) For each example given in **(a)** describe the kinds of business tasks the software is used to perform. **(8 marks)**

Any 4 suitable use examples 1 mark each + 1 mark for detail e.g.

E-mail management software - sending e-mails	1 mark

to clients with details of their orders | 1 mark

Word processing software - produce letters | 1 mark
by mail merge to update customers with statements of accounts/charges/offers | 1 mark

Spreadsheet software - to create budgets/accounts/analyse cash flow | 1 mark
to allow management to make informed financial decisions | 1 mark

Presentation software - to create presentations | 1 mark
to promote their products/services or for training purposes | 1 mark

Maximum Marks for (b) **8 marks**
Total Maximum Marks for Q2 **12 marks**

Question 3

[3.1] For each of the tasks listed below give an appropriate example of a computing device that could be used to perform this task, along with details of its physical size. Please note each answer given needs to be different from the others.

(i) Weather forecasting, through modelling the world's weather systems
(ii) Processing transactions in a bank
(iii) Producing insurance quotations, when visiting customers in their homes
(iv) Creating mailing labels in an office
(v) Taking notes during a lecture or training session

(Total 15 marks)

1.5 marks for each appropriate different type of computer, 1.5 marks for a suitable physical size and 1.5 marks for a realistic cost in $ or £, to a maximum of 3 marks per subdivision

(i) Weather forecasting
- super computer | 1.5 marks
- fills a large room | 1.5 marks
- £ millions | 1.5 marks

(ii) Processing bank transactions
- mainframe | 1.5 marks
- small room size | 1.5 marks
- £50,000 + | 1.5 marks

(iii) Producing insurance quotations when visiting customers in their homes
- laptop/tablet | 1.5 marks
- ca. 300mm x 200mm x 30mm/200mm x 150mm x 8mm | 1.5 marks
- £200+ | 1.5 marks

(iv) Creating mailing labels in an office
- PC/Mac/Desktop (not tablet) | 1.5 marks
- 200mm x 500mm x 400 mm | 1.5 marks
- £300+ | 1.5 marks

(v) Taking notes during a lecture or training session - different from (iii)
- laptop/tablet/Smartphone | 1.5 marks
- ca. 300mm x 200mm x 30mm/200mm x 150mm x 8mm/ phone sized! | 1.5 marks
- £200+ | 1.5 marks

N.B. A difference in price should be indicated between tablets, laptops/smartphones and desktops with laptops or 2 in 1 laptop/tablet devices being likely to be the most expensive and desktop computers being the likely to be the least expensive for similar specifications. Dimensions can also

be given in terms of references to other things e.g. a desktop PC will occupy approximately ½ of a desk, when including the keyboard, monitor and mouse.

Total Maximum Marks for Q3   15 marks

Question 4

(a) [4.2] (i) Explain what the letters in term GUI stand for and what a GUI is.   **(4 marks)**

Graphical User Interface	2 marks
Or partially correct answer	1 mark

Any 2 appropriate descriptive points e.g.
A visual interface for a user to interact with a computing device	1 mark
Usually controlled with some kind of pointing device such as a mouse/finger	1 mark
Composed of pictorial representations such as icons	1 mark
Designed to make the device easier for a novice to use	1 mark
It is customisable to help meet the needs/tastes of the user	1 mark

(ii) Name an **alternative** to the most widely used Personal Computer GUI and describe its features.   4 marks

*Any one suitable example **but not Windows** e.g.*
Mac OS	1 mark
Android	1 mark
Chrome OS	1 mark
X Windows	1 mark
Linux GUI in any of its flavours	1 mark

Any 3 suitable features e.g.
Icons	1 mark
Toolbars	1 mark
Windows	1 mark
Menus	1 mark
Folders	1 mark
Recycle/trash bin	1 mark
Interface control methods - drag, click, double click, touch, pinch, swipe etc.	1 mark

Maximum Marks for (a)   8 marks

(b) [4.3] Give an example of a Personal Computer GUI you are familiar with and describe how to format a USB disk drive using this GUI.   **(4 marks)**

Interface example (see above) if different from given in 4(a) (ii) e.g. Windows	1 mark

Up to 4 suitable steps e.g.
Open the file management software	1 mark
Select the appropriate USB drive icon	1 mark
Select the File menu/Right click	1 mark
Click the Format option	1 mark
Input the name for the drive	1 mark
Confirm the format command	1 mark

Maximum Marks for (b)   4 marks
Total Maximum Marks for Q4   12 marks

Question 5

(a) [5.1] Explain what a backup is and why backups are important to organisations.　　**(4 marks)**

Any 2 suitable elements of a description e.g.
A copy of data	1 mark
Stored in a different location	1 mark
Such as on a disc/tape/hard drive/in the cloud	1 mark

Any 2 suitable reasons for backups e.g.
For use in the event of an accident or disaster such as a fire, flood, earthquake	1 mark
To enable the organisation to carry on operating	1 mark

Maximum Marks for (a)　　　4 marks

(b) [5.1] Give two different methods of creating a backup and for each method state its advantages. **Please note** this question does not refer to the media on which you store the backup.
　　　　　　　　　　　　　　　　　　　　　　　(4 marks)

Any 2 suitable examples e.g.
Full backup	1 mark
Incremental backup	1 mark

Any 2 suitable reasons that match the method e.g.
Full backup - all data is backed up	1 mark
Incremental backup - it is faster than a full backup	1 mark

Maximum Marks for (b)　　　4 marks

(c) [5.1] Describe the key elements of an effective backup regime.　　**(4 marks)**

Any 4 suitable backup elements e.g.
Need to be made every day - to minimise loss of data in the event of a disaster	1 mark
Need to be made outside (main) business hours - to minimise disruption	1 mark
Need to be stored off site - to minimise the chance of a disaster destroying it	1 mark
Need to be physically secure - to avoid physical theft of the data	1 mark
Need to be electronically secure e.g. encrypted - to prevent electronic theft	1 mark
Need to be tested - to ensure that data recovery is possible, if ever required	1 mark
Staff need to be trained in correct backup and recovery procedures	1 mark
Staff need to know the importance of backups - possible organisation failure	1 mark

Maximum Marks for (c)　　　4 marks
Total Maximum Marks for Q5　　12 marks

Question 6

[9.2] (a) State the name of an e-mail management program you are familiar with and the organisation responsible for providing this software.　　**(2 marks)**

Any one e-mail management program (version not required and web based providers permitted) **and** *corresponding provider e.g.*
Outlook	1 mark
- Microsoft	1 mark
Thunderbird	1 mark
- Mozilla	1 mark
Mail	1 mark
- Mail	1 mark
Gmail	1 mark

- Google	1 mark
Yahoo! mail	1 mark
- Yahoo	1 mark
Hotmail/Live mail	1 mark
- Microsoft	1 mark

Maximum Marks for (a)　　　　**2 marks**

(b) For the program you stated in part **(a)**, describe how to access and read new messages.**(4 marks)**

Any 2 suitable steps to access the e-mail software e.g.

Start - type in the name of the program	1 mark
Click on the program's icon	1 mark
Load up the browser	1 mark
Type in the URL - www.gmail.com	1 mark
Input username and password	1 mark

Any 2 suitable steps to access the messages e.g.

Click on Inbox	1 mark
Double click on the message to read	1 mark
Use the Previous/Next button to read other messages	1 mark

Maximum Marks for (b)　　　　**4 marks**

(c) With the e-mail software you stated in part **(a)** already loaded, describe how to create and send an e-mail message, including an attachment, to a new customer.　　　　**(6 marks)**

Any 6 suitable steps e.g.

Click the New/Compose button or keyboard shortcut e.g. Ctrl + N	1 mark
Click the To button & select the recipient/s or input addresses manually	1 mark
Add any CC or BCC recipient/s	1 mark
Input the message subject	1 mark
Type the message	1 mark
Click the Insert/Attach/Attachments/Paperclip button	1 mark
Navigate to the attachment location/s	1 mark
Double click each attachment	1 mark
Proof read the message and or spell check the message	1 mark
Click the Send button or keyboard shortcut e.g. Ctrl + Enter	1 mark

Maximum Marks for (c)　　　　**6 marks**
Total Maximum Marks for Q6　　　　**12 marks**

Question 7

[10.1] State four different types of network topology and give **one** advantage and **one** disadvantage of each.

Type - 1 mark, Corresponding advantage - 1 mark, Corresponding disadvantage - 1 mark e.g.

Bus	1 mark
Advantage - cheap to implement - single cable	1 mark
Disadvantage - network fails if the cable fails, costly to maintain, limited size	1 mark
Mesh	1 mark
Advantage - very stable, fast transfer, high traffic, easy to fault-find	1 mark
Disadvantage - very expensive in terms of cabling, redundancy	1 mark
Ring	1 mark
Advantage - fast, stable, easy to extend, easy to fault find	1 mark
Disadvantage - if a node fails so does the network, data travels slower than star	1 mark
Star	1 mark

Advantage - robust, easy to expand, fast	1 mark
Disadvantage - if the hub fails so does the network, quite costly	1 mark
	Maximum 3 marks per topology

Total Maximum Marks for Q7   12 marks

Question 8

[11.4] (a) Describe what measures should be implemented to ensure the security of **electronic** data within a business.   **(7 marks)**

Give credit for reference to backups. Any 7 suitable points e.g.

All data storage facilities are physically secure - locked	1 mark
All data storage facilities are physically protected - alarms, guards/dogs	1 mark
All data storage facilities are only physically accessible to authorised users	1 mark
Electronic access to electronically stored data is only for authorised users	1 mark
Mobile devices that can access data are properly secured e.g. encrypted	1 mark
Staff are appropriately trained/monitored in relation to data security	1 mark
System software is automatically patched to reduce vulnerability	1 mark
Anti-virus/anti-malware software is implemented and updated on all devices	1 mark
Firewall software is installed and updated to reduce the chance of hacking	1 mark
Control the use of removable media - to prevent data being removed/infected	1 mark
Devise, implement and test disaster recovery plans	1 mark
Monitor logs for unusual activity that could indicate an attack	1 mark

Maximum Marks for (a)   7 marks

[11.4] (b) Describe what measures a **network manager** can implement to maximise the security of staff passwords.   **(6 marks)**

Give credit for reference to complexity of password even if specific details are not given.
Give credit for reference to not telling other people passwords .
Any 6 suitable points e.g.

Password aging - force change every 30 days	1 mark
Password complexity - minimum number of characters, use of case/symbols etc.	1 mark
Repeat password restrictions - cannot use the same password again	1 mark
Restrictions on password content - name/s, dates etc.	1 mark
Prevent use of the same password for multiple systems	1 mark
More restrictive rules for higher level system access	1 mark
Staff training and testing to ensure they understand the importance of security	1 mark

Please note this question is intended to check understanding of network manager password policy and procedure implementation rather than password setting by individual users so limited credit should be given for the latter.

Maximum Marks for (b)   6 marks
Total Maximum Marks for Q8   13 marks