



IT Applications and Skills

NQF

Subject Examiner's Report

Unit Title: IT Applications and Skills

Unit Code: ITAS

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Question 1

Question wording

(a) In order to look professional, word processed business documents should contain no errors in content or presentation. Describe three features that are available in modern word processing systems to minimise errors. (5 marks)

(b) Give four examples of print settings that can be changed when printing a word processed document. For each setting, give an example of when it would be appropriate to be used. (8 marks)

(c) Describe how to create a macro in a word processing program. In your answer state which program your description relates to. (7 marks)

Learning Outcome 1

1. Comments on learners' performance

The average mark was 7.9 out of 20 which is lower than is typical for the word processing question. There seemed to be a lack of knowledge of how to create a macro in a word processing program.

2. Mark scheme

(a) 1 mark per suitable point up to a maximum up to a maximum of 5 marks e.g.

Check the spellings of any words underlined in red 1 mark

Right click red underlined words and select the correct correction/add to dictionary 1 mark

Check the grammar and punctuation of any green underlined text 1 mark

Correct any identified grammar and punctuation errors identified by the green underline 1 mark

Spell check the whole document e.g. via Review - Spelling & Grammar or pressing F7 1 mark

Proof read the document for meaning, grammar, punctuation and spelling 1 mark

Get someone else to proof read the document 1 mark

Get software to read the document content out loud 1 mark

Print preview a document before printing or sending it to anyone to identify layout errors 1 mark

Correct any layout errors identified via the print preview 1 mark

When checking a word processed document the user should proof read it, or get someone else to do so, to ensure that it makes sense and to help ensure that it has correct spelling, punctuation and correct grammar. All advanced word processing programs have spelling and grammar checking features e.g. underlining words red to indicate spelling errors, underlining text green to indicate possible grammar or punctuation errors. Each of these kind of potential errors should be reviewed to check whether there is a mistake and they can usually be corrected by right clicking the text and selecting the appropriate option. It is also recommended that a spelling and grammar check of the whole document is undertaken e.g. in Microsoft Word the F7 key will initiate this. Finally a print preview will enable the user to check for errors in presentation. Needless to say having identified any errors they need to be corrected and the revisions checked for errors.

(b) 1 mark per suitable setting and 1 mark for a corresponding reason for the setting up to a maximum of 8 marks. See suggested answer for examples.

Setting Reason

Number of copies This could be changed to 2 copies - 1 for sending a letter & 1 for filing

Double sided Printing double sided reduces the amount of paper used and the bulk of the printout

Colour Documents containing photographs and/or extensive use of colour look more professional

Eco/draft quality When producing a document for proof reading best quality is not needed and using eco/draft quality consumes less toner

Collate If printing multiple copies of a document this ensures that the printouts do not need to be manually collated

Stapled Useful for keeping the pages of documents together e.g. reports

Multiple pages per sheet Means a document printout uses fewer pages and could be useful for reviewing draft copies of document for layout/proof reading purposes

(c) 1 mark per suitable step up to a maximum of 6 marks. See suggested answer for steps.

1 mark for an appropriate word processing program e.g. Microsoft Word

Using Microsoft Word 2013

Click the Record Macro button on the status bar

Type in a suitable name for the macro

Select whether it is going to be initiated with a keyboard shortcut or toolbar button

Select which toolbar button will be on / what the keyboard shortcut is

Select where the macro code is going to be stored e.g. in the normal template

Input a description of what the macro is designed to do e.g. print 2 copies of a document

Perform the desired actions using the mouse and keyboard e.g. File - Print - Copies = 2 - print

Click the Stop Recording button

Test the macro out to check that it works properly

If the macro does not work properly either re-record it or edit the code via the programming interface

Please note a macro can also be created via the programming interface

3. Recommendations

Candidates need to familiarise themselves with the syllabus, ideally from practical word processing experience.

Examiner's tips

Learn what macros are, how they are created and what they can be used for, in a word processing context.

Question 2

Question wording

- (a) 'Average' is an example of a spreadsheet function that is used to add up a range of cells. State three other spreadsheet functions and, for each, explain what the function does and give an example of a formula containing the function. (9 marks)
- (b) When checking spreadsheet formulae, it is often useful to produce a printout displaying all formulae. Describe the formatting steps that should be followed in order to make this formula printout easy to use for checking a spreadsheet's formulae. (3 marks)
- (c) Templates are a useful method of creating common types of spreadsheets, such as sales reports. Describe the process you would use to create a new spreadsheet using a template. (4 marks)
- (d) Explain the difference between the spreadsheet terms 'workbook' and 'worksheet'. (4 marks)

Learning Outcome 2

1. Comments on learners' performance

Candidates on average scored fewer than 1/3 of the marks for this question with only 4 scoring more than half of the marks. This is a slight deterioration in performance than in previous sessions.

2. Mark scheme

- (a) 1 mark per suitable identified function
1 mark for corresponding explanation
1 mark for example formula
Maximum 9 marks in total
See suggested answer for examples - marks for other suitable functions permitted

Function	Description	Example
AVERAGE	Calculates the average (mean) value of the specified range of cells.	= AVERAGE (B4:B10)
COUNT	Calculates the number of cells in the specified range of cells that contain numerical values	= COUNT (B4:B10)
IF	Displays one of two possible results based on a logical test, usually relating to cell values. For example if an exam score is greater or equal to the pass mark the cell would display "Pass" otherwise it would display "Fail"	= IF (B4>=40, "Pass", "Fail")
MAX	Calculates the maximum value in the specified range of cells that contain numerical values	= MAX (B4:B10)
MIN	Calculates the minimum value in the specified range of cells that contain numerical values	= MIN (B4:B10)

- (b) 1 mark per suitable step up to a maximum of 3 marks. See suggested answers

Ensure all formulae are displayed e.g. select the Formulas tab and click the Show Formulas button
Adjust column widths to display all formulae in full e.g. select all (Ctrl + A) and autofit column width
Set to print Row and Column headings e.g. via Page Setup and the Sheet tab
Set the page to the most appropriate orientation - usually Landscape
Set the Print Titles appropriately (rows to repeat at the top, columns to repeat at the left)
Adjust the scaling of the printout e.g. All columns fit on one page
Add page numbers e.g. x of y

- (c) 1 mark for a suitable example - see suggested answer
1 mark for each suitable element of a description of the benefits up to a maximum of 3 marks

An expenses claim form template would be useful to a business because staff would be able to quickly complete it, all calculations would automatically be performed and it could be e-mailed for approval. Additionally and the people processing the claim would have it in standard form so that it would be easier to check for errors.

(d) 1 mark for each suitable element (see suggested answer) up to a maximum of 4 marks

A worksheet is a rectangular grid of cells each with its own unique cell reference e.g. A21. Each cell can contain either text, a number or a formula and the worksheet is used for analysing and presenting numerical data. Worksheet data can also be used to create charts which can either be displayed on a worksheet or as a separate chart sheet. A workbook is a spreadsheet file composed of worksheets and chart sheets. So a worksheet is part of a workbook.

3. Recommendations

Learn what spreadsheet functions are, how to use them within formulae and which functions are most commonly used.

Examiner's tips

If possible get hands-on experience of using spreadsheets and in particular the creation of formulae containing functions.

Question 3

Question wording

- (a) For a Relational Database Management System application of your choice describe the process of creating a new database file and populating it with database objects and relationships specified in a database design document. (14 marks)
- (b) One of the great benefits of databases is the ability to extract information from them that match certain criteria e.g. displaying details of sales over a given period from a sales database. Describe two different ways of extracting information such as this from a database. (6 marks)

Learning Outcome 3

1. Comments on learners' performance

In line with previous sessions performance on this question was the second lowest scoring on the paper with an average of 3.6 out of 20 marks. This would appear to be due to lack of experience of the practical use of database.

2. Mark scheme

(a) 1 mark for name of suitable software e.g. Microsoft Access (do not give the mark for non RDBMs such as Microsoft Excel)

1 mark for each suitable step up to a maximum of 13 marks - see suggested answer

Using Microsoft Access 2013

Load Microsoft Access 2013 e.g. via the Start button

Select the blank database option

Input a suitable name for the database e.g. Sales Database

Select an appropriate location for storing the file e.g. in a Databases folder on a network drive

Create each table specified in the design document in the table Design View

For each table specify the Name, Data Type, Description and Properties of each field and the Primary and any Foreign Key/s as specified in the design document

Save each table with the name specified in the design document e.g. tblSale

Create the relationships between the tables as specified in the design document

Create any queries specified in the design document in query Design View

For each query specify the tables, fields, sorting and criteria specified in the design document

Save each query with the name specified in the design document e.g. qrySales_Last_Month

Create any forms specified in the design document in form Design View

For each form specify the data source tables/queries, fields and controls specified in the design document

Save each form with the name specified in the design document e.g. frmSales_Input

Create any reports specified in the design document in report Design View

For each report specify the data source tables/queries, fields and controls specified in the design document

Save each report with the name specified in the design document e.g. rptSales_Last_Month

(b) 1 mark per suitable method maximum of 2 marks e.g. query, filter, view

1 mark per element of a suitable description of using this method up to a maximum of 2 marks

Maximum of 6 marks in total

Queries are one way of extracting data from one or more tables. To create a query in Microsoft Access 2013 select Query Design from the Create tab of the Ribbon then add in the appropriate table/s, add the desired fields, specify the field sorting required and input criteria needed to return the desired results such as specifying the range of dates of the sales period being investigated. Queries are database objects that can be saved and reused.

A more temporary approach is to use a filter - in Microsoft Access 2013 double click on the object to filter and right click on the field to filter by then specify the required criterion and repeat this process for additional fields to filter by. If a filter is found to be particularly useful it can be saved as a query.

3. Recommendations

It is strongly recommended that if at all possible candidates get practical experience of creating multiple table databases, queries, forms and reports to improve their understanding of this part of the syllabus.

Examiner's tips

Learn the theoretical content of the database section of the syllabus.

Question 4

Question wording

- (a) Explain the similarities and differences between the e-mail commands 'Reply' and 'Reply to All' and a possible consequence of using the wrong one. (6 marks)
- (b) At times files may be compressed before being attached to an e-mail message.
- (i) Describe the advantages of compressing files that need to be sent via e-mail. (5 marks)
- (ii) Describe in detail a method of compressing multiple files into a single archive. (5 marks)

Learning Outcome 4

1. Comments on learners' performance

As usual this question was the best answered on the paper with an average of 40% of the credit achieved.

2. Mark scheme

(a) 1 mark per suitable point of similarity up to a maximum of 4 marks e.g.

Creates a reply message to the sender

Automatically addressed

Prefixes the subject with an indication that it is a reply e.g. Re.

Usually includes the original text

1 mark per suitable point of difference up to a maximum of 2 marks e.g.

Reply to All inserts the e-mail addresses of original recipients in To and CC fields

Reply only inserts e-mail of sender

1 mark per suitable possible consequence up to a maximum of 2 marks e.g.

Using Reply to All in the wrong circumstances can be annoying to the original recipients because your reply to the original message may be only relevant to the message sender

Maximum 6 marks for the whole question

Using the Reply or Reply to All command creates a pre-addressed reply message to the sender with the message subject being prefixed with something to indicate it is a reply e.g. Re. and a message body usually containing the original message text. The main difference between the two commands is that Reply will only address the reply message to the e-mail address of the original message sender whereas Reply to All automatically adds in the e-mail addresses of the original message recipients (present in the To and CC fields) to the reply. Using Reply to All in the wrong circumstances can be annoying to the original recipients because your reply to the original message may be only relevant to the message sender but will be received by multiple recipients.

(b) (i) 1 mark per reasonable advantage up to a maximum of 3 marks e.g.

Compressed files usually have a smaller file size than the total size of the individual file/s and so will take a shorter time to upload before sending and a shorter time to download when received

Some e-mail servers may have message size restrictions meaning that they may be unable to receive important large files unless they are compressed

Some e-mail servers may prevent certain file types being received if they are not compressed e.g. .mdb

Compressed files can be password protected to reduce the chance of unauthorised access

Because a compressed archive file can contain multiple component files it can be quicker to attach than attaching the component files individually

A compressed archive can contain a whole folder hierarchy which will be retained when the archive is extracted by the recipient/s, which can save the time required to recreate the hierarchy and move the files into the appropriate folders

The e-mail will occupy less space on the e-mail servers and computers they are stored on

(i) Compressing files before e-mailing them can save time both in attaching the file and downloading the attached files because compressed files usually are of a significantly smaller file size than the individual file/s that have been compressed and will also occupy less storage space on the sender and recipient systems. Compression may be the only way to get a file to its destination via e-mail because some systems restrict the total message size and similarly some attachment types may be rejected by some e-mail systems but if compressed they may get through. Compressed files can be password protected to help reduce the chances unauthorised access which can be more convenient than password protecting all of the individual files in an archive. Finally a compressed folder can contain whole folder hierarchy which will be recreated when the folder is extracted from the compressed archive.

(ii) In detail a method of compressing multiple files into a single archive.

1 mark per reasonable step up to a maximum of 3 marks e.g.

Create a folder to contain all of the files that are going to be compressed

Copy/move the files (and folders) to be compressed into the folder to be compressed

Install suitable compression software e.g. WinZip, 7Zip, Stuffit etc.

Load the appropriate software

Right click on the folder to compress

Select the appropriate command e.g. Send to - Compressed (zipped) Folder

Add a password if required

Suggested answer

Firstly, create a folder to store all of the files that are to be compressed and move or copy the desired files into this folder. If necessary install suitable compression software e.g. WinZip, 7Zip, Stuffit and load it up. Normally the folder to compress can be right clicked on and the appropriate command chosen e.g. Send to - Compressed (zipped) Folder and a password can be added.

3. Recommendations

Candidates need to ensure that they give sufficient detail – of the 10 marks available for part (b) few candidates achieved more than half of them because their answers were too brief.

Examiner's tips

Learn what file compression is used for as well as its benefits when transferring data.

Question 5

Question wording

- (a) Identify two types of document that can be used to share data and, for each type of document, state how it might be used in a business setting and state the advantages of sharing the data. (6 marks)
- (b) (i) Explain the term 'hyperlink' and explain how you would insert a hyperlink into a word processed document. (4 marks)
- (ii) Give an example of the use of a hyperlink in a business setting. (2 marks)

Learning Outcome 5

1. Comments on learners' performance

In common with previous sessions candidates achieved the lowest marks on this question. 50% of candidates achieved zero credit.

2. Mark scheme

(a) 1 mark for each suitable example up to a maximum of 2 marks e.g. spreadsheet/database chart/extract in a word processed document, mail merge

1 mark for each corresponding type of document up to a maximum of 2 marks e.g. business report, mail merge letter

1 mark for each corresponding advantage of sharing data up to a maximum of 2 marks e.g. if a business report contains a linked spreadsheet chart this will automatically update if the spreadsheet figures are changed so it saves time, mail merges save time when creating a number of similar letters

A word processed business report can contain linked data and charts from a spreadsheet to make it look professional and by using this shared data the report can be created more quickly and will automatically update if the spreadsheet data changes so is a more efficient way of working.

A word processed letter can be combined with a database via the process of mail merge which allows personalised versions of standard letters or e-mails to be produced much more quickly than typing them individually and these documents can be saved and adapted for future similar letters/e-mails to make their creation even quicker.

(b) 1 mark for each suitable element of a description up to a maximum of 2 marks e.g.

A hyperlink is part of a word processed document e.g. some text or a picture that has been associated with a web page address, file location or e-mail address

1 mark for each suitable instruction step up to a maximum of 2 marks e.g.

Select the text, image, location or object to hyperlink to Click Insert - Hyperlink / use keyboard shortcut e.g. Ctrl + K Paste/type in the hyperlink address or browse to find the file location and click the OK button Alternatively in some word processors text based hyperlinks can be typed e.g. www.abeuk.com and when the space bar, Tab key or Enter key is pressed the hyperlink is automatically created

1 mark for each suitable usage up to a maximum of 2 marks e.g.

Inserting a business e-mail address e.g. sales@abeuk.com in an electronic copy of letter an e-mail message or so that the user can click it to start creating an e-mail message to the sales team

Linking a business logo to the organisation's web site within an electronic version of a company report would allow users to find out more about the organisation

A hyperlink is part of a document such as text, an image or a drawing object that is linked with a web page, e-mail address, location in a document or file location and when the hyperlink is clicked the associated web page is loaded, e-mail is created and addressed or location accessed. To insert a hyperlink first select the object to link to the choose Insert - Hyperlink and input the address to link to and click the OK button. Hyperlinks are useful in electronic copies of documents such as company reports and can link to the company's web site or a suitable e-mail address where the reader can request more information.

3. Recommendations

Candidates need to learn the full contents of Learning Outcome 5 to help maximise their marks for this question.

Examiner's tips

Practice doing previous exam papers and reviewing answers in conjunction with the mark scheme to identify gaps in knowledge and pick up tips on improving your overall score.

Question 6

Question wording

- (a) Commercial IT systems are often said to have a Front End and a Back End. Explain the terms 'Front End' and 'Back End', supporting your answer with an example of each. (6 marks)
- (b) Explain what the letters in the term EFTPOS stand for, explain what an EFTPOS is, and give an example of a type of business that would use an EFTPOS. (6 marks)

Learning Outcome 6

1. Comments on learners' performance

The average percent of the credit achieved was 41%, which is similar to previous exam sessions. Most marks were lost on part (a) of the question because of lack of understanding of what a front end and a back end are.

2. Mark scheme

(a) 1 mark per each reasonable element of an explanation of a Front End including an example up to a maximum of 3 marks - see suggested answer for examples

1 mark per each reasonable element of an explanation of a Back End including an example up to a maximum of 3 marks - see suggested answer for examples

The front end of an IT system is the interface that the user interacts with and is composed of text, images and objects. For instance an online store's front end is made up of their sales web pages

The back end of an IT system is the database and systems that operate behind the front end and process the user input and initiates appropriate actions. For instance an online store's back end is made up of the database/s and systems that store and process customer requests. The back end systems ensure that customer orders are completed and dispatched to the intended recipients and that the associated financial transactions are posted to the relevant accounts.

(b) Electronic Funds Transfer at Point of Sale - 2 marks if fully correct 1 mark partially (at least 2 words) correct.

1 mark per suitable element of an explanation up to a maximum of 3 marks

An EFTPOS is a system that allows the processing of product sales

Usually via the combination of a barcode scanner, integrated with a till, a database system and an electronic payment system (contactless, chip and pin, swipe or any combination of the three) enabling a customer to pay for goods with a payment (debit or credit) card

1 mark for a suitable example of where an EFTPOS can be found e.g. high street shop, supermarket

Electronic Funds Transfer at Point of Sale systems are used by a wide range of retail outlets to process customer sales transactions. Typically they consist of a bar code scanner (used to look up the details of each item sold on the organisations database system/s), connected to an electronic till that processes the sale items and calculates the resultant cost. This is also linked to a card payment system (e.g. chip and PIN and/or contactless payment) which connects to the banking computer networks to authorise and process or decline payments between the customer's account and that of the retail outlet.

3. Recommendations

Candidates need to learn what a front end and a back end is so that they can give sufficient detail if they come up in question 6.

Examiner's tips

To get as many marks as possible make sure your answer gives what the question has asked for.