**Cambridge International Diploma in ICT
Standard Level**

Scheme of Work

5191
Core Module

UNIVERSITY *of* CAMBRIDGE
International Examinations

Introduction

Communication

This section of the Core Module is about using the Internet and email to gather and communicate information.

What is assessed in this section of the Core Module?

Use of email to:
- receive messages
- send messages and files using facilities such as reply, forward, copies, create new messages
- receive files as attachments and save them
- send files as attachments

Use of the Internet to:
- locate information on a specified website
- search for information
- download and save information

Tutor Preparation Required to Deliver this Module

You will need to:

- set up email addresses
- prepare email message to be sent to the students
- check connection to Hothouse-design website and location of files for download by candidates
- know what is on any specified website
- be aware of any Internet search results set for the students
- provide instructions showing what the students have to do

Underpinning Knowledge

How to:

- log-in to the email system
- save and attach files to messages
- log-in to the Internet
- locate specified websites
- search for specified information
- download and save files from a specified site

General Principles and Procedures

You should prepare your notes for this session to include information on use of the Internet. You may prepare documents identifying the procedure for log-in. This is also a good time to discuss the implications of security on the Internet, including giving personal details (such as bank details).

Candidates need to learn and to practise locating files from a variety of sources including saving attachments to email messages, finding and saving files from specified Internet sites. They should be able to identify .TXT and .CSV file formats and be able to import or load these into their preferred appropriate software package. Candidates should be aware that materials essential to later activities in the core module must first be located and saved either as attached files to email messages or as files downloaded from an Internet site. They may practise locating files from a variety of network drive locations as well.

Document Production

This section of the Core Module is about using word processing facilities and preparing to incorporate output from other applications into an integrated document. The candidate will need to open a stored file and have available an image for placing as well as a file to insert into the document.

What is assessed in this section of the Core Module?

- setting up a page format
- top and left margins
- line length
- line spacing
- alignment (fully justified, left aligned and centred)
- control of text size
- page orientation (portrait and landscape)
- entering data
- loading stored data
- positioning an image
- cropping an image
- control of image size
- indenting text
- using bullet points
- presenting a table
- controlling page breaks and re-pagination
- importing files
- saving documents
- printing documents (draft and final)

Tutor Preparation Required to Deliver this Module

You will need:

- prepared files for the students to load and/or import. These should include the following file types:
    - word processing
    - documentation giving instructions and/or showing elements from different software applications combined in one document
    - prepared files should be attached to emails, located on an identified website(s), or in various locations on local network

Underpinning Knowledge

- purpose of different application types
- file management
- file naming conventions
- types of storage (networks, hard disk and floppy disks)
- loading stored data
- how to enter, insert, delete and move data
- control of alignment and text
- use of the spellchecker facility
- placing and manipulating images in a document

General Principles and Procedures

It is important that students understand the importance of security on computer systems. In preparation for this module you could cover the following topics:

- handling passwords to gain access to:
- the operating system
- applications
- data

This should include file management techniques including:

- creating, renaming, deleting and access to directories/folders
- browsing a directory or folder
- creation of different file types

Data Manipulation

This section of the Core Module is about using database facilities to manipulate data to solve problems.

What is assessed in this section of the Core Module?

- entering data
- loading stored data
- sorting data (alphabetical/numeric, ascending/descending)
- selecting data by specified criteria (AND/OR/NOT)
- using arithmetic operations / numeric functions to perform calculations
- saving data for use in text-based documents
- producing reports
- printing reports

Tutor Preparation Required to Deliver this Module

You will need:

- files prepared for the students to load and amend
- documentation showing the amendments the students have to make
- source documents from which the students will extract data for entry

The database files should be about 100 records with 5-8 fields, and should contain different types of data (numeric, alpha, date etc.).

The documents should identify the file structure and outline the exercises you wish the students to carry out on the database file.

Underpinning Knowledge

- how to open applications
- file management
- file naming conventions
- basic database functions (set up of structure, data entry, manipulation, preparation of output)
- loading stored data
- basic manipulation (sort and search data)
- control of formatting (integer, decimal places, column width and alignment)

General Principles and Procedures

You should prepare your notes for this session to include:

- selecting, opening, closing, saving, deleting files
- sizing, moving and scrolling windows.

Integration

For this section candidates will need to know how to import and place text, data files and graphics files into an existing document. They will already have demonstrated some of the skills in the Document Production assignment. Here they make final amendments to the document, integrating data extracted and saved in the Data Manipulation assignment. Finally they complete the Communications section by sending their work as a file attached to an email message.

Scheme of Work

Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Communication				
Session Plan One				
• the language and concepts used in electronic communication • to read an email • to receive a file	1.1.1 1.4.1	• examine sample messages (either online or hard copy) to understand language used • open previously sent email messages • transfer file attachments into storage, and open file attachments	• global email with individual addresses for each student • prepared and sent email messages • prepared and sent e-mail messages with file attachments in a variety of formats	• language includes, mail box, address book, address line, carbon copy, blind carbon copy, address, send, reply, forward, file attachments, browser, URL, search engine • file attachment formats to include TXT, RTF, CSV, GIF, JPG and others commonly used within the centre
Session Plan Two				
• to send an email • to send a file	1.2.1 1.3.1	• send, reply and forward email messages to tutor, other students and globally • send data as file attachments from previously stored files	• global email with individual addresses for each student • email messages sent to students from which they can reply • addresses to send mail to • files held within storage areas prepared to be sent as attachments	• file attachment formats to include: • TXT, RTF, CSV, GIF, JPG and others commonly used within the centre • hint – keep the files to be sent relatively small but real or realistic documents

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Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan Three				
• to locate information from a website using a browser	2.1.1	• locate pre selected material from a website from a given URL • discussion relating to data protection and copyright issues, both in general terms as well as those specific to your country/region	• Internet/Intranet access with a web browser • prepared list of suitable URL's which have been carefully checked	
Session Plan Four				
• to locate information from a website using a search engine • to download and save specified information	2.2.1 2.3.1	• locate information using different search engines • discussion about filtering - depending upon the search engine and the complexity of its advanced search facilities • download selected material from a website	• Internet/Intranet access with a web browser • prepared search criteria which have been carefully checked • Internet/Intranet access with a web browser • prepared list of suitable URLs which have been carefully checked or carefully selected search criteria	• it is recommended that prior to the candidates attempting to sit the specimen paper that one of the search engines used is the Hothouse website search facility • this activity can be from a given URL or through a search engine

Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Document Production				
Session Plan Five				

• open text documents from a variety of formats
• edit page format
	3.1.1
	4.1.1
	4.1.2
	4.1.3
	4.1.4
	11.1.1
		• load data from specified files from a variety of text based files in a range of locations
		• for each document organise the page format using given criteria for:
		  - edit page size
		  - edit page orientation
		  - headers, footers and page numbers
		  - change margin settings
		  - save and print document/s
			• files located in a range of locations
			• different text based file types
			• a variety of small editing exercises with answers for each file opened
				• each of the documents in this activity could contain one or two exercises from the following activities to give each task a more realistic approach

Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan Six				
• insert/key in text and numbers into an existing document • edit fonts • import images into existing text documents • manipulate graphics images • text wrap around graphics	3.2.1 3.3.1 3.3.2 3.4.1 5.5.1 11.1.1	• load an existing document and key in text and numbers to make changes or additions • edit the font and point sizes within these documents • insert graphics from a variety of sources • manipulate graphics images both within the text processor and within other packages • manipulate text by wrapping it around graphics images • save and print document/s	• files located in a range of locations • selection of graphics found on websites which have been carefully selected • a variety of small editing exercises with answers	• graphics sources should include the Internet, saved files, and where possible other digital sources like scanners, digital camera etc. • graphics type should include images, charts and tables • graphics should be moved, resized (whilst maintaining the aspect ratio) and cropped

Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan Seven				

• apply and adjust line spacing
• apply and adjust text alignment
• apply and adjust margin and tab stop settings
	4.1.5
	4.1.6
	5.1.1
	11.1.1
		• load existing prepared document/s and change line spacing using a variety of different spacings
		• load existing prepared document/s and change alignments
		• load existing prepared document/s and change margin and tab stop settings to obtain:
		  – indented text
		  – indented lists
		  – indented paragraphs
		  – hanging paragraphs
		  – save and print document/s
			• prepared text documents suited to a range of alignments and line spacing
			• prepared text documents suited to setting and amending rulers, margins and tab stops
				• as a minimum: single, 1.5 times and double line spacing must be covered, others like 6 or 10 line spacing may be used to demonstrate title pages etc.
				• as a minimum, left aligned, right aligned, centre aligned and fully justified should be covered along with ruler and tab stop positions which determine the finished position of text on the page

Session Plan Eight				
• apply and remove bullets from a list	5.1.1 5.2.1 11.1.1	• simple exercises entering lists, then applying bullets to the list. In subsequent exercises indent the bulleted list from the main paragraph by specified distances • save and print document/s	• simple exercises to enter then bullet lists • sample text files where lists within the text need bulleting and indenting	• this activity should provide reinforcement of margins, tab stops and indentation

Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan Nine				
• create tables • edit existing tables • insert page breaks	5.3.1 5.4.1 11.1.1	• create tables within a document • insert rows and columns into an existing table • delete rows/columns from an existing table • discussion exercise on the use of page breaks • insert page breaks to ensure that tables do not cross pages • insert page breaks to ensure that no widows or orphans are left • save and print document/s	• simple exercises to tables within existing documents from given data • sample text files containing tables with instructions to insert rows and columns (adding the data required) • sample text files containing tables with instructions to delete specified rows and columns • printed documents for discussion on insertion of page breaks • sample text files for the insertion of page breaks	• for creation of the table start by specifying the number of rows and columns to be created

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Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Data Manipulation				
Session Plan Ten				
• load existing file(s) and enter data • determine appropriate data types for fields • produce simple report	6.1.1 6.2.1 7.1.1 9.1.1 11.1.2 11.1.3	• develop a reasonably large set of data for candidates to manipulate, or provide a number of different data sets to reflect related topics in other areas of the curriculum or reflecting personal interests of the candidate • encourage candidates to collect and organise data, related to documents in subject areas of their interest. Help them to set data extraction criteria to create lists that would be relevant for incorporation into own document	• set(s) of data in a retrievable format eg comma separated values • the test data manipulation materials that follow in this guide	• preparation will include familiarisation with the database package that is going to be used in terms of: • acquiring data i.e. locating and importing from CSV format • checking field headings and data types for contents of fields • entering or amending records • selecting and sorting records • locate and acquire data, importing a file into the database package. (locations will continue familiarisation from above of attached files, remote locations, own work areas) • produce simple report(s) with calculation as appropriate to the data and specified requirements • save and print files

Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Session Plan Eleven				
• perform calculations on numeric data • reorganise data to meet needs • produce report(s)	6.1.1 6.2.1 7.1.1 8.1.1 9.1.1 11.1.2 11.1.3	• develop a reasonably large set of data for candidates to manipulate, or provide a number of different data sets to reflect related topics in other areas of the curriculum or reflecting personal interests of the candidate	• set(s) of data in a retrievable format e.g. comma separated values • students' own saved files • or the test data manipulation materials that follow in this guide	• developing skills from above materials e.g. Calculated field in a query • runtime calculation(s) in report • including any of the skills listed under 7.1 • sorting data in a query or at runtime of report • save and print files or send file(s) as attachments
Session Plan Twelve				
• reorganise data by selecting subsets • produce reports based on subsets of the data with calculations	6.1.1 6.2.1 7.1.1 8.1.1 8.2.1 9.1.1 11.1.2 11.1.3	• develop a reasonably large set of data for candidates to manipulate, or provide a number of different data sets to reflect related topics in other areas of the curriculum or reflecting personal interests of the candidate	• set(s) of data in a retrievable format e.g. comma separated values • students' own saved files • or the test data manipulation materials that follow in this guide	• developing skills from above materials with selection of appropriate subsets using a variety of the criteria skills specified in 8.2 • produce report(s) based on subsets derived from queries, with section breaks and calculated fields as negotiated or specified in assignment materials • save extracts of data as specified for later inclusion in a text based document

Assessment Objectives	Performance Criteria	Classroom Ideas	Resources	Notes
Integration				
Session Plan Thirteen				
• bringing together files to create an integrated document	10.1.1	• produce a document combining text, graphics, table(s) and imported data extracted from database and implementing a specified format and layout • as above with either different materials or different specifications	• specified document, image file(s) and database file • or the test integration materials that follow in this guide	• combine data into an integrated document • check specification of and consistency of document format, layout and presentation • present the document. Save and print or send as specified by instructions • combine data into an integrated document • check specification of and consistency of document format, layout and presentation • present the document. Save and print or send as specified by instructions
Session Plan Fourteen				
• All	All	• practice test	• example material from tutor guide (see below) if not used for practice in the activities above	• full communication skills, document production, database manipulation and extraction, integration and presentation of final product
• Session Plan Fifteen				
		• practice test debrief session: discussion of tasks and answers	• marked printouts for each student • prepared model answers for each task	• review special arrangements and procedures for test
Session Plan Sixteen				
• undertake Core Module Assessment		• Core Module Assessment	•	• needs extended session

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