Suggested answers to the Appendix B Practice Paper 02 from:

Information Technology for CSEC Examinations

by Alan Wood and Howard Campbell.

Published by Macmillan Caribbean www.macmillan-caribbean.com

Pages	Question	Key	Mark
	1)		
	a)	Social media specialist [1]. Web developer [1].	2
	b)	Any six from: need to think about reasons for the website [1], the intended audience [1], number of web pages [1], layout of the page [1], content of each page [1], navigation hyperlinks [1], appropriate images [1], testing [1], publishing to the WWW [1]	6
	c)	Web browser [1]. Http or https [1].	2
	d) i)	Length check works by comparing the number of characters entered against the number of characters expected [1]. In this case the airport code is always 3 characters long so the length check will report an error if fewer or more than 3 characters are entered [1].	2
	ii)	Any four from: data type check, format must be DD/MM/YYYY [1]. Presence check, a date must be present [1]. Reasonableness check, the return date must be after the departure date [1]. Length check, must be 10 characters long [1]. Range check, date must be in the open for bookings dates[1].	4
	e) i)	Uploading is from the local computer to a remote computer [1] and downloading is from a remote computer to a local computer [1]	2
	ii)	FTP or File Transfer Protocol [2 marks for correct answer, 1 mark for partial correct answer].	2
		TOTAL	20

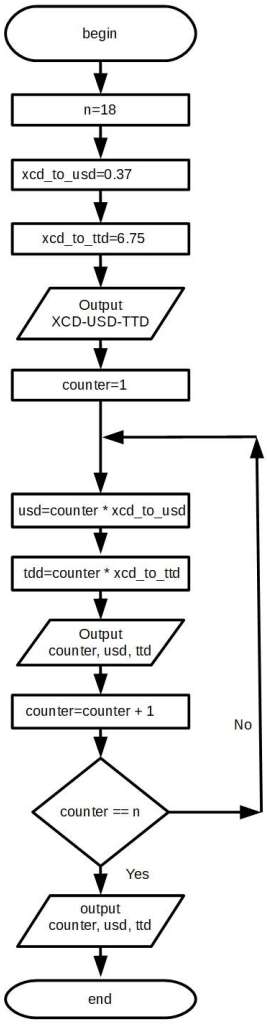
<table>
<tr><th>Pages</th><th>Question</th><th>Key</th><th>Mark</th></tr>
<tr><td></td><td>2)</td><td></td><td></td></tr>
<tr><td></td><td>a) i)</td><td>A virus or malware may infect the device.</td><td>1</td></tr>
<tr><td></td><td>ii)</td><td>Any two from: hyperlink may lead to obscene material causing personal distress [1], hyperlink may lead to a fraudulent website pretending to be a well known trusted website leading to identity theft [1], hyperlink may be to music piracy website causing the person to illegal purchase music [1]</td><td>2</td></tr>
<tr><td></td><td>b)</td><td>Any three from: Never reveal passwords or pin numbers [1]. Treat with caution any unsolicited emails [1]. Never use public Wi-fi hotspot for confidential information like online banking [1]. Don’t post detail information or images like home address, birthday, friends and holiday dates [1]. Or any valid alternative.</td><td>3</td></tr>
<tr><td></td><td>c) i)</td><td>Hotspot [1].</td><td>1</td></tr>
<tr><td></td><td>ii)</td><td>Radio waves [1] but also accept IEEE 802.</td><td>1</td></tr>
<tr><td></td><td>d)</td><td>Any suitable values.
<table>
<tr><td>Field name</td><td>Data Type</td><td>Size</td></tr>
<tr><td>First name</td><td>Text</td><td>32</td></tr>
<tr><td>Last name</td><td>Text</td><td>32</td></tr>
<tr><td>Email</td><td>Text</td><td>64</td></tr>
<tr><td>Telephone</td><td>Text</td><td>16</td></tr>
</table></td><td>4</td></tr>
<tr><td></td><td>e) i)</td><td>Email [1].
Telephone [1].</td><td>2</td></tr>
<tr><td></td><td>ii)</td><td>Input form [1], directly in table view [1], also accept import data.</td><td>2</td></tr>
<tr><td></td><td>f)</td><td>Mail merge requires a primary template document [1] which contains place holder fields [1]. Data from the data file, the database table, [1] is used to populate the place holder fields to create the bulk mail document [1].</td><td>4</td></tr>
<tr><td></td><td></td><td>TOTAL</td><td>20</td></tr>
</table>

<table>
<tr><th>Pages</th><th>Question</th><th>Key</th><th>Mark</th></tr>
<tr><td></td><td>3)</td><td></td><td></td></tr>
<tr><td></td><td>a) i)</td><td>Any one form: tablet, laptop, netbook, phablet.</td><td>1</td></tr>
<tr><td></td><td>b)</td><td>Any three from: turnaround document [1], printed from computer [1] read by computer [1]. Also accept human-readable or machine-readable [1].</td><td>3</td></tr>
<tr><td></td><td>c)</td><td>Barcode reader [1].</td><td>1</td></tr>
<tr><td></td><td>d)</td><td>=A4*$B$1 or =A$4*B$1 [2 marks for correct answer, 1 mark for partial correct answer].</td><td>2</td></tr>
<tr><td></td><td>e) i)</td><td>Relative addressing does not include $ [1]. When a relative address is copied or moved the cell addresses are automatically updated [1]. Absolute addressing includes $ [1]. When an absolute address is copied or moved any row or column preceded by a $ does not change.

Example of relative addressing cell

<table><tr><td></td><td>A</td><td>B</td><td>C</td></tr><tr><td>1</td><td>3</td><td>4</td><td>=A1+B1</td></tr><tr><td>2</td><td>4</td><td>5</td><td></td></tr></table>
Cell C1 copied to cell C2 is changed to =A2+B2 [1].

<table><tr><td></td><td>A</td><td>B</td><td>C</td></tr><tr><td>1</td><td>3</td><td>4</td><td>=$A$1+$B$1</td></tr><tr><td>2</td><td>4</td><td>5</td><td></td></tr></table>
Cell C1 copied to cell C2 is NOT changed it remains =$A$1+$B$1 [1].</td><td>5</td></tr>
<tr><td></td><td>f)</td><td>“n” is a constant it defines how many times to loop.</td><td>1</td></tr>
<tr><td></td><td>g) i)</td><td>Line 7 will be executed 18 times [1] because the counter runs from 1 to n or 1 to 18 [1].</td><td>2</td></tr>
</table>

	ii)	 [lose 1 mark for each incorrect or missing symbol]	10
		TOTAL	25

Pages	Question	Key	Mark
	4)		
	a) i)	Write 'A simple program to average the homework score and test score for 30 students.' total = 0 [1 mark initialise total] Do the following 30 times [1 mark correct loop] Write 'Please give the next student's homework score number ' Read the homework score [1 mark get input] Write 'Please give the student's test score number ' Read the test score number total = homework score + test score Calculate the average = total/2 [1 mark calculate average] Write 'The average score for this student is ' Write the average [1 mark output result]	5
	ii)	Write 'A simple program to average the homework score and test score for 30 students and find the highest average.' total = 0 highest average = 0 [1 mark initialise highest average] Do the following 30 times Write 'Please give the next student's homework score number ' Read the homework score Write 'Please give the student's test score number ' Read the test score number total = homework score + test score Calculate the average = total/2 If average > highest average [1 mark for correct if] Highest average = average Write 'The average score for this student is ' Write the average EndDo Write 'The highest average of the 30 students is ' Write highest average [1 mark output highest average] [1 mark for working program]	4
	iii)	Any two programming languages; Pascal [1], Python [1], C [1], Visual Basic [1], etc.	2
	b)	Any four points from: Both a spreadsheet and database program can store the student information [1]. Spreadsheets have quick and easy to use sort and filter features, in a database queries and reports have to be used [1]. Mr. Runcie could use a free, online spreadsheet [1]. Using a database would allow the data to be linked to other related data in another table e.g. a contact information table [1]. Spreadsheet programs are generally more common found on desktop computers [1]. Spreadsheet programs are primarily automatic calculation tools [1]. Database programs are primarily data manipulation tools [1].	4
	c) i)	Information Technology IT technician [1].	1
	ii)	Any two from: repairing failed computers [1], installing new computers [1], connecting computers to a network [1], installing new software [1].	2

<table>
<tr><td></td><td>iii)</td><td>A network adapter attaches to a computer port to add networking functionality [1] if the computer does not already have an internal network card [1].</td><td>2</td></tr>
<tr><td></td><td>d)</td><td>Begin
runningTotal = 0
averageScore = 0.0
for counter = 1 to 5 do
print “Please enter a score”
read score
runningTotal = runningTotal + score
endfor
averageScore = runningTotal/5
print averageScore
End

<table><tr><td>runningTotal</td><td>averageScore</td><td>counter</td><td>score</td><td>output</td></tr><tr><td>0</td><td>0.0</td><td>1</td><td>2</td><td></td></tr><tr><td>2</td><td></td><td>2</td><td>4</td><td></td></tr><tr><td>6</td><td></td><td>3</td><td>6</td><td></td></tr><tr><td>12</td><td></td><td>4</td><td>8</td><td></td></tr><tr><td>20</td><td></td><td>5</td><td>10</td><td></td></tr><tr><td>30</td><td>6</td><td></td><td></td><td>6</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>
Correct headings [2], first line of values [1], correct values [1], correct output [1].</td><td>5</td></tr>
<tr><td></td><td></td><td>TOTAL</td><td>25</td></tr>
</table>