

## WANN, PapaCambridge.com MARK SCHEME for the October/November 2011 question paper

## for the guidance of teachers

## 9691 COMPUTING

9691/23

Paper 2 (Written Paper), maximum raw mark 75

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

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		-	www.xtrapapers.com
	Page	2 Mark Scheme: Teachers' version	Syllabus er
		GCE AS/A LEVEL – October/November 2011	9691
1	(a) e.( -ea -m (ai	ch can work on individual modules odules can be written in parallel swer must be specific to this scenario)	Max Com
	(b) Ea	ch box correctly labeled (Initialisation, StockOrdering, Sales) Stock Control Initialisation StockOrdering Sales SalesReport	Order significant
		MonthlySalesReport	[1]
	( <b>c)</b> 1 i 1 i	nark for 2 boxes under SalesReport nark for correct labelling	[2]
	(d) -th -th -st -ai	ese will be local variables at only have effect in the module they are in // local scope ored in different memory locations d have no meaning outside that module	Max [2]
	(e) (i)	-keywords/reserved words -a word in the vocabulary of the <u>language</u> -that can only have the meaning defined in that language	Max [1]
	(ii)	e.g. Visual Basic: -names must begin with a letter -must not contain a space/punctuation characters/certain cl -must be unique <u>in their block/scope</u> -can't be more than 64 characters	naracters
		-can't be a keyword	Max [3]
	(iii)	Any keyword // word breaking a rule given by the candidate	[1]
	(f) (i)	604	[1]
	(ii)	(a+b)/100	[1]
	(iii)	Black box CAO	[1]
	(g) (i)	-valid/normal data -extreme / boundary data	[2]
	(ii)	6 different types of test data sets + 6 sensible reasons	
		Reason must relate to the scenario Value + correct reason = 1 mark	[6]

Page 3	Mark Scheme: Teachers' version	Syllabus 7.0 er
	GCE AS/A LEVEL – October/November 2011	9691
(h) (i)	(PromotionCode="gold") OR (PromotionCode="silver") OR (PromotionCode="bronze")	Cambrid
	1 mark for 3 separate correct conditions 1 mark for ORs	
	Alternative answer: PromotionCode IN ["gold", "silver", "bronze"] 2 marks (1 mark for IN, 1 mark for ["gold", "silver", "bronze"])	[2]
(ii)	-wrong or no promotion rate applied -the program would not find associated records	[2]
(iii)	1 mark for clear information 1 mark for choice as a drop-down list 1 mark for move on button	Max [2]
(a) (i)	-Valid data entered CAO	[1]
(ii)	-Invalid data. Try again CAO	[1]
(b) e.g. REZ IF I	<pre>Pascal ADLN (Position); Position = `F' CHEN WRITELN('Valid data entered') CLSE IF Position = `D' THEN WRITELN('Valid data entered') ELSE IF Position = `G' THEN WRITELN('Valid data entered') ELSE WRITELN('Invalid data. Try again</pre>	′);
e.g. Pos IF ELS N ELS N ELS	VB6 Sition = txtBox.Text Position = "F" THEN MsgBox "Valid data entered" SEIF Position = "D" THEN MsgBox "Valid data entered" SEIF Position = "G" THEN MsgBox "Valid data entered" SE MsgBox "Invalid data. Try again" D IF	

Page 4	Mark Scheme: Teachers' version	Svilabus A er
	GCE AS/A LEVEL – October/November 2011	9691
		°C.
e.g. VB	2005 on = Console ReadLine	mb
IF Pos	ition = "F" THEN	10
Cons	ole.WriteLine("Valid data entered")	30
ELSEIF	Position = "D" THEN	
Cons	ole.WriteLine("Valid data entered")	
ELSEIF	Position = "G" THEN	
Cons	ole.WriteLine("Valid data entered")	
ELSE	ale Writeline ("Invalid data Tru again")	
END TE	ore.writeLine( invalid data. Iry again )	
e.g. C#		
positi	on = Console.ReadLine();	
if (po	sition = "F")	
{	ncele Writeling (WVelid dete entered").	
1	nsole.writeLine("valid data entered");	
else i	f (position = "D")	
{		
Со	<pre>nsole.WriteLine("Valid data entered");</pre>	
}		
else i	f (position = "G")	
{ C	nsolo Writeline ("Walid data entered").	
}	iisole.wiitehine( valid data entered ),	
else		
{		
Со	nsole.WriteLine("Invalid data. Try again"	();
}		
1 mark f	or correct input	
1 mark f	or 1st condition correct	
1 mark f	or all conditions correct	
1 mark f	or correct output for valid input	
1 mark f	or correct output for invalid input	
1 mark f	or conditions indented	Max [5]
<b>c)</b> -Sequer	ce, selection (in any order, these words only)	[1]
•		
d) -A proce	ss of repeating	
-A block	of statements/number of steps	
	me condition is met	Max [2]
-Until so		
-Until so		
-Until so	ar a aquatar variabla	
-Until so e) 1 mark 1	or a counter variable	
-Until so e) 1 mark 1 1 mark 1	or a counter variable or correctly initialising counter	
-Until so e) 1 mark 1 1 mark 1 1 mark 1	or a counter variable or correctly initialising counter or incrementing counter or correct condition for terminating	

Pa	ige 5	Mark Scheme: Teache	ers' version	Syllabus A	er
	GCI	E AS/A LEVEL – Octobe	r/November 2011	9691	20
(f)					Call.
	Field Name	Data Type	Field Size (bytes)		0110
	PlayerID	Integer/byte/shortint	a value within 1–6	NOT a range	0°.Co.
	Sex	Boolean/character	1		3

(f)				
	Field Name	Data Type	Field Size (bytes)	
	PlayerID	Integer/byte/shortint	a value within 1–6	NOT a range
	Sex	Boolean/character	1	
	PlayerName	String/Text	a value within 10–50	NOT a range
	Position	Character/String	1	
	DateOfBirth	Date/Integer/String	2/4/6/8	

1 mark per cell

(g) (i) -logic (error)

	(i)	(ii)
EITHER:	Index ← 1	Index $\leftarrow$ 0
OR:	UNTIL Index = 45	UNTIL Index >45 or UNTIL Index = 46
	[1]	[1]

(h) Gtotal ← 0 FOR Index  $\leftarrow$  1 TO 45 IF Club[Index].Position = 'G' THEN Gtotal  $\leftarrow$  Gtotal + 1 ENDIF ENDFOR

1 mark for correct FOR loop 1 mark for correct content of IF statement and condition 1 mark for ENDFOR in correct position or equivalent structure

[3]

[10]

[1]

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-		Mark Sc	heme: Tea	achers' ve	rsion	Syll	abus 2 er
	GCE	AS/A LE	VEL – Oct	ober/Nove	mber 2011	96	<u>591</u> 7030
a)							Phi
s	x	q[1]	q[2]	q[3]	q[4]	Surprise	.01
СНО	JABA						
	1						_
		с					-
	2						_
							_
							_
	3						_
				0			_
	4						_
						СНО	
<b>b)</b> -pick o	ut the first	word of a	sentence/	aroup of w	ords		ſ
<ul> <li>b) -pick o</li> <li>c) -assign</li> <li>-that v</li> <li>-name</li> </ul>	ut the first ns return v alue is retu of functior	word of a alue to Su urned to th n used as a	sentence/ rprise e function a variable	group of wo	ords		[ Max [
<ul> <li>b) -pick o</li> <li>c) -assign</li> <li>-that v</li> <li>-name</li> <li>d) -is a si</li> </ul>	ut the first ns return v alue is retu of functior ubroutine /	word of a alue to Su urned to th n used as a / can be ca	sentence/ rprise e function a variable alled more	group of wo	ords // can be c	alled from c	[ Max [
<ul> <li>b) -pick of</li> <li>c) -assign</li> <li>-that v</li> <li>-name</li> <li>d) -is a su</li> <li>-given</li> <li>-may t</li> </ul>	ut the first ns return v alue is retu of functior ubroutine / a name/id	word of a alue to Su urned to th n used as a / can be ca entifier	sentence/ rprise e function a variable alled more	group of wo	ords // can be c	alled from c	[ Max [
<ul> <li>b) -pick o</li> <li>c) -assign -that v</li> <li>-name</li> <li>d) -is a su -given -may t</li> <li>-return</li> </ul>	ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to	word of a alue to Su urned to th n used as a / can be ca entifier leter value the progra	sentence/ rprise e function a variable alled more s from the im	group of wo call than once	ords // can be c	alled from c	[ Max [ lifferent locations Max [
<ul> <li>b) -pick of a signature</li> <li>c) -assignature</li> <li>-that vare</li> <li>-that vare</li> <li>-that vare</li> <li>-name</li> <li>d) -is a signature</li> <li>d) -is a signature</li> <li>-is a signature</li> <l< td=""><td>ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to nds REPE</td><td>word of a alue to Su urned to th n used as a / can be ca entifier heter value the progra</td><td>sentence/ rprise e function a variable alled more s from the</td><td>group of wo call than once</td><td>ords // can be c</td><td>alled from c</td><td>[ Max [ lifferent locations Max [</td></l<></ul>	ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to nds REPE	word of a alue to Su urned to th n used as a / can be ca entifier heter value the progra	sentence/ rprise e function a variable alled more s from the	group of wo call than once	ords // can be c	alled from c	[ Max [ lifferent locations Max [
<ul> <li>b) -pick of a signature</li> <li>c) -assignature</li> <li>-that vanture</li> <li>-name</li> <li>d) -is a signature</li> <li>d) -is a signature</li> <li>-name</li> <li>d) -is a signature</li> <li>-name</li> <li>d) -is a signature</li> <li>-name</li> <li>-name</li> <li>-ithe signature</li> <li>-pick</li> <li>-pic</li></ul>	ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to nds REPE y finding a	word of a alue to Su urned to th n used as a / can be ca entifier heter value the progra AT n empty sp nd of word	sentence/ rprise e function a variable alled more s from the im	group of wo	ords // can be c	alled from c	[ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [
<ul> <li>b) -pick of</li> <li>c) -assign -that version</li> <li>-that version</li> <li>-name</li> <li>d) -is a sursion</li> <li>-given -given -given</li> <li>-may transformation</li> <li>e) (i) -e -b -ir</li> <li>(ii) -ir</li> </ul>	ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to nds REPE y finding a idicating el	word of a alue to Su urned to th n used as a / can be ca entifier the progra AT n empty sp nd of word	sentence/ rprise e function a variable alled more s from the im	group of wo	ords // can be c	alled from c	[ Iifferent locations Max [ Max [
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<ul> <li>b) -pick of a signature</li> <li>c) -assignature</li> <li>-that vanture</li> <li>-is a signature</li> <li>d) -is a signature</li> <lid) -is="" a="" li="" signature<=""> <li>d) -is a signature</li> <lid< td=""><td>ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to nds REPE y finding a idicating en identation neaningful/</td><td>word of a alue to Su urned to th n used as a / can be ca entifier heter value the progra AT n empty sp nd of word</td><td>sentence/ rprise e function a variable alled more s from the m pace ariable na</td><td>group of wo call than once program</td><td>ords // can be c</td><td>alled from c</td><td>[    </td></lid<></lid)></ul>	ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to nds REPE y finding a idicating en identation neaningful/	word of a alue to Su urned to th n used as a / can be ca entifier heter value the progra AT n empty sp nd of word	sentence/ rprise e function a variable alled more s from the m pace ariable na	group of wo call than once program	ords // can be c	alled from c	[   
<ul> <li>b) -pick of</li> <li>c) -assign -that v -name</li> <li>d) -is a su -given -may t -return</li> <li>e) (i) -e -b -ir</li> <li>(ii) -ir</li> <li>(ii) -ir</li> <li>f) -chara -from t</li> </ul>	ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to nds REPE y finding a ndicating el ndentation neaningful/ cters are c he left han	word of a alue to Su urned to th n used as a / can be ca entifier the progra AT n empty sp nd of word /sensible v	sentence/ rprise e function a variable alled more s from the im pace ariable na n turn rt of each	group of wo call than once program mes	ords // can be c	alled from c	[   
<ul> <li>b) -pick of</li> <li>c) -assign -that v -name</li> <li>d) -is a su -given -may t -return</li> <li>e) (i) -e -b -ir</li> <li>(ii) -ir</li> <li>f) -chara -from t -the fir -if 2 wo</li> </ul>	ut the first ns return v alue is retu of functior ubroutine / a name/id ake param s value to nds REPE y finding a ndicating el ndentation neaningful/ cters are c he left han st higher c ords are th	word of a alue to Su urned to th n used as a / can be ca entifier leter value the progra AT n empty sp nd of word / sensible v compared i ind side/stal ode value e same wh	sentence/ rprise e function a variable alled more s from the im pace ariable na n turn rt of each determine nen one ei	group of wo call than once program mes mes word es the large nds	ords // can be c st word	alled from c	[ Max [ lifferent locations Max [ Max [