



(National Council for Vocational Awards)



Computer Programming C20013

Sample Theory Examination 2007

Duration: Two Hours

INSTRUCTIONS TO CANDIDATES:

*Answer any **three** questions*

All questions carry equal marks

Answer the questions using the spaces in this exam booklet

Return this question & answer paper when finished

This sample written exam counts as 40% of the total module

NAME (PRINT): _____

PPS NUMBER: _____

DATE: _____

Question 1. Total 40 marks.

(a) This program contains 4 errors that will stop it from compiling. List the errors.

20 marks

```
#!/usr/bin/perl
# A greeting program!
Print "Hello, there. What is you name? ";
$punters_name=<STDIN>>;
print \nHello, $punters_name.\nHave a nice day!\n";
```

1	
2	
3	
4	

(b) In all languages variables have to be declared before use. True or False? **10 marks**

--

(c) Does a Perl array variable commence with a % or a \$ symbol?

10 marks

--

Question 2. Total 40 marks.

(b) Write the general form of the method to read lines of data from a file **10 marks**

(b) Write the general form of the **foreach** statement: **10 marks**

(c) The following perl code will compile and run but will not generate the desired output. Why?

2 x 10 marks

```
#!/usr/bin/perl
$filename="myrecords.dat";
open (MyDataFile, "< $filename");
@The_Records = <MyDataFile>;
close (MyDataFile);
# This program should write out the
# contents of a file on numbered lines.
$n=1;
foreach $record (@The_Records)
{
    print "n: %record\n";
    $n++;
}
```

Question 3. Total 40 marks.

(a) Indicate the values in each of the variables **\$x**, **\$y** and **\$z** after this program finishes:

30 marks

```
#!/usr/bin/perl
$num = 0;
$x = 310;
while ($num <= 5)
{
    $num=$num+1;
    $x = $x;
}
$y = $num * $num;
$z = 12 * 6 * $x;

print ("$x, $y, $z\n");
```

<i>Variable</i>	<i>Value</i>
\$x	
\$y	
\$z	

(b) What screen output is generated by this short program:

10 marks

```
#!/usr/bin/perl
printf ("%c%c%c%c%c%c%c%c\n%c%c%c%c%c%c%c%c%c\n",
50, 32, 51, 32, 53, 32, 55, 49, 49, 32, 49, 51, 32, 49, 55);
```

Question 4. Total 40 marks.

(a) Write a perl loop to write out every odd number between 11 and 101 and then write out the the total of the numbers which have been printed.

30 marks

(b) If you are to use a **while** loop or a **for** loop; what generally is considered to be the difference between both loop types?

10 marks

Figure 1. The ASCII table.

			032	SP	033	!	034	"	035	#		
036	\$	37.00%	038	&	039	'	040	(041)		
042	*		043	+	044	,	045	-	046	.	047	/
048	0	049	1	050	2	051	3	052	4	053	5	
054	6	055	7	056	8	057	9	058	:	059	;	
060	<	061	=	062	>	063	?	064	@	065	A	
066	B	067	C	068	D	069	E	070	F	071	G	
072	H	073	I	074	J	075	K	076	L	077	M	
078	N	079	O	080	P	081	Q	082	R	083	S	
084	T	085	U	086	V	087	W	088	X	089	Y	
090	Z	091	[092	\	093]	094	^	095	_	
096	`	097	a	098	b	099	c	100	d	101	e	
102	f	103	g	104	h	105	i	106	j	107	k	
108	l	109	m	110	n	111	o	112	p	113	q	
114	r	115	s	116	t	117	u	118	v	119	w	
120	x	121	y	122	z	123	{	124		125	}	
126	~	127										
Printable alphanumeric and punctuation characters used in normal document text												

