

451/1

COMPUTER STUDIES

Paper 1

Trial 1 - 2012

2 Hours

MARKING SCHEME.

SECTION A (40 MARKS)

- 1.*The text will be indented.
 - *The text will be moved to the next line.
 - *The cursor will move to the beginning of the current line.
- 2.*They are accurate.
 - *They are fast.
 - *They are convenient e.g. not emotional
- 3.*They are big in size.
 - *They would not be directly accessible to the CPU if used as removable.
 - *The computer does not offer a drive by which they would be used.
- 4.a)An electronic point of sale terminal.(POST)
 - b)*Barcode reader.
 - *Keyboard.
 - c)*Correct prices are used at the checkout counter.
 - *Reduce on the number of attendants required thus reducing on the payroll expense and therefore increasing the profit.
- 5.a)A dot matrix printer.
 - b)Because it is an impact printer and therefore will use the striking mechanism which will help in making the triplicates by carbon.
- 6.a)The date when the document was created.
 - b)The date when it was last modified.
 - c)The file extension e.g. .Doc or .txt
 - d)The size of the document.
- 7.a)Viruse infection.
 - b)Corrupt or damaged application files.
- 8.a)Enforce laws that protect the owner of the data and information against piracy.
 - b)Make software cheap enough to increase affordability.
 - c)Use licenses and certificates to identify original software.
 - d)Set installation passwords that deter illegal installation of software.
- 9.*The number of processors the hardware can support.
 - *The hardware configuration e.g. the harddisk capacity,processor speed & memory capacity.
 - *The type of computer in terms of size and make.
- 10.a)Batch processing.
 - b)*Saves on time and energy.
 - *It is a convenient method since all the bills are printed at the time they need to be dispatched.
11. *Cost effective.
 - *Learning is more effective since such systems are supported by clear graphical presentations e.g. Video clips and voice demonstration.
 - *The system can be run a number of times about the same topic until the learner is comfortable With the topic.
- 12.*Assigning accounts to users so as to reinforce network security.
 - *Data encryption during transmission.
 - *Establishing share-level security whereby the user decide what information to share across the Network.
- 13.a)Automatically formats the field entry into specific format.
 - b)Appears automatically in the datasheet or form if nothing is entered by the user to change it.
- 14.a)To be aware of he terms and conditions of the software incase of failure or malfunction.
 - b)To be in a position to tell whether the software can be installed or copied in more than one computer.
- 15.*In airports for airlines booking.
 - *In hotel for booking of rooms.

SECTION B (60 MARKS)

16a)*Used to add functionality to the HTML pages.

*They are made up of special blocks of code known as scripts.

b)**Overflow errors*: Occurs if the result from a calculation is too large to be stored in the allocated memory space.

**Truncation errors*: Result from having real numbers that have a long fraction part which cannot fit in the allocated memory space.

**Rounding errors*: Result from raising or lowering a digit in a real number to the required rounded number.

c) START

```
PRINT "Enter the workers name and means of transport"
```

```
INPUT N, P
```

```
IF P=Public THEN
```

```
    ALLOWANCE=200
```

```
ELSE
```

```
    ALLOWANCE=200+100
```

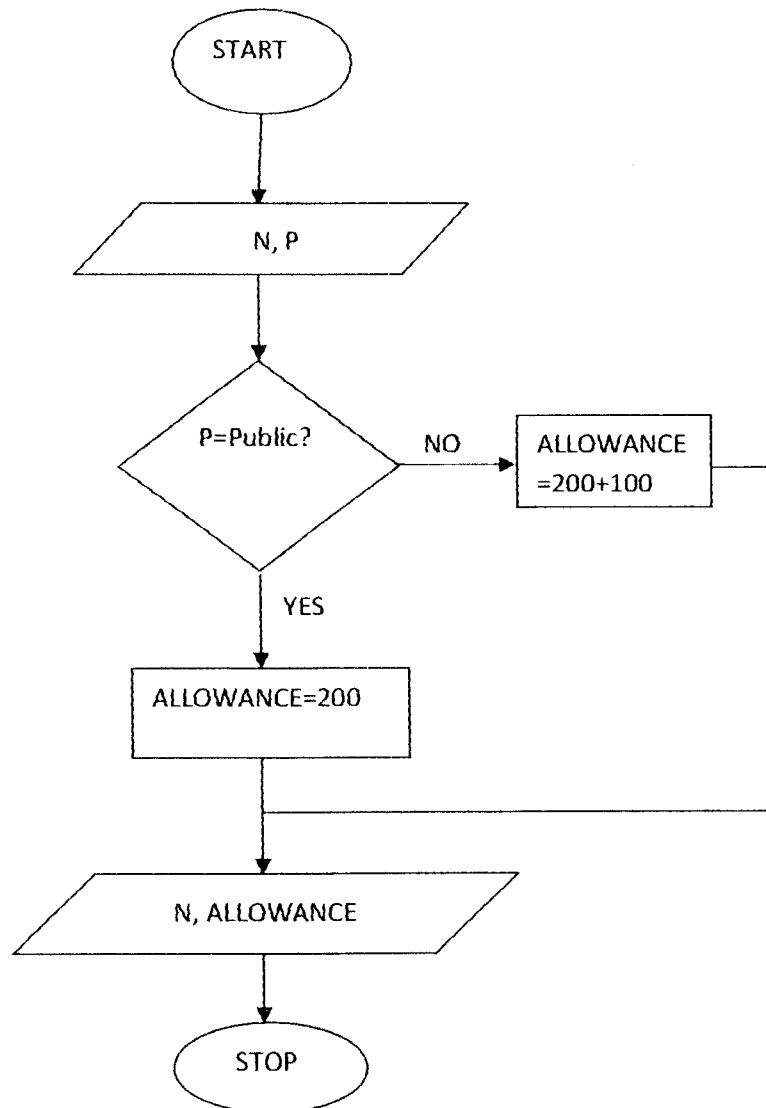
```
END IF
```

```
PRINT N
```

```
PRINT ALLOWANCE
```

```
STOP.
```

cii)



ciii)*Incorrect symbols may be used in the flowchart stages.

*The flowchart may not have a logical flow.

17.a)*Decimal Number System.

*Binary Number System.

*Octal Number System.

*Hexadecimal Number System.

bi)

Place Value	2^2	2^1	2^0	.	2^{-1}	2^{-2}	2^{-3}
Decimal Digit	1	1	0	.	1	0	1
Value	4	2	1	.	0.5	0.25	0

$$N_{10} = (4+2+1).(0.5+0.25+0) = 7.75_{10}$$

c) 12.6875_{10}

2	12	
2	6	0
2	3	0
2	1	1
	0	1

$$0.6875 * 2 = 1.375$$

therefore $12 = 0011$

$$0.375 * 2 = 0.75$$

while $0.6875 = 1011$

$$0.75 * 2 = 1.5$$

thus 12.6875_{10} is equivalent to

$$0.5 * 2 = 1.0$$

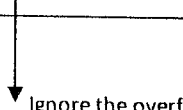
111011_2

d) $100101_2 \dots\dots\dots 011010_2$

11010000

$+ 01101000$

$(1)00111000$



Ignore the overflow bit. Therefore answer = 111000_2

18a) The boundary outlining the printable area of a cell.

b) The line outlining the cell.

c) Axis label: This are used to identify the x and y axis of a chart while data labels are used for identifying the value of different bars/points on a chart.

d) Cropping is hiding of the unwanted parts of a graphic while resizing is making a graphic smaller.

e) i) $= B3 * C3$

ii) $= C5 + (B8 * C5)$

iii) COUNT IF

iv) MIN

19.a) i) This is browsing through web pages.

ii) Copying information from a computer or a storage device to a web page.

iii) A section of an e-mail account that holds all received mails.

b)*It is relatively difficult to establish or configure the network.

*The initial cost is very high.

*The network coverage may be limited within a particular area (Scope of cover).

c)*Using Cyber Patrol.

*Using Cyber sitter

*Using Net Nanny.

d)*Unauthorised access:The information being communicated is insecure because it can be tapped by unauthorized persons which can lead to communication distortion.

*Limited Access:Not all people in all places are in a position to access the internet and therefore cannot communicate via emails.

*Inadequate knowledge:Not all persons are computer literate thus leading to communication breakdown.

