



PROVISIONAL MARKING KEY
COMPUTER STUDIES I
Section A : 55 marks

There are **six** questions in this section. Answer all the questions in the space provided.

1. a. State the **two** views in Ms Publisher.
 - *Single page view*
 - *Double page view*
- b. Outline the steps you would follow to inset graphics in Ms Publisher
 - *Click the slide then select insert tab.*
 - *choose the graphics you wish to insert by selecting one of the commands in the illustrations group.*
- c. Describe any **two** similarities between the OSI and TCP/IP network models
 - *Both the reference models are based upon layered architecture.*
 - *The physical layer and the data link layer of the OSI model correspond to the link layer of the TCP/IP model.*
 - *The network layers and the transport layers are the same in both the models.*
 - *The session layer, the presentation layer and the application layer of the OSI model together form the application layer of the TCP/IP model.*
 - *In both the models, protocols are defined in a layer-wise manner.*
 - *In both models, data is divided into packets and each packet may take the individual route from the source to the destination.*
- d. On which network layer do routers operate
 - *Network layer,*
- e. state one protocol found at this layer?
 - *The protocol is IP*
2. a. State **one** difference between absolute referencing and relative referencing
 - *relative referencing is the one that changes depending on its position of reference on the worksheet while absolute referencing is made on specific address and does not change even if the formula is copied to another cell.*
 - *Absolute uses dollar sign (\$) to specify the cell reference while the relative only uses plain cell address*
- b. State any two advantages of using an electronic spreadsheet over a calculator?
 - *Data organization*
 - *Automatic calculations*
 - *Ease of editing*
 - *Ability to create formulas*
 - *More data can be saved on a spreadsheet*
- c. What is the importance of filtering data in a spreadsheet?



- *It is important in large tables when you need to work only with records meeting your precise criteria*

d. List any two types of charts in a spreadsheet?

- | | | |
|------------------------|--------------------------|-----------------------|
| • <i>Line Charts</i> | • <i>Scatter Charts</i> | • <i>Area Charts</i> |
| • <i>Column Charts</i> | • <i>Surface Charts</i> | • <i>Radar Charts</i> |
| • <i>Bar Charts</i> | • <i>Doughnut Charts</i> | • <i>Stock Charts</i> |
| • <i>Pei Charts</i> | | (2 marks) |

3. a. Define the following terms;

i. Computer network

Is the collection of computers linked together using transmission media for the purpose of communication and resource sharing (1 mark)

ii. Data communication

Refers to the process of transmitting data signals from one point to another through the network (1 mark)

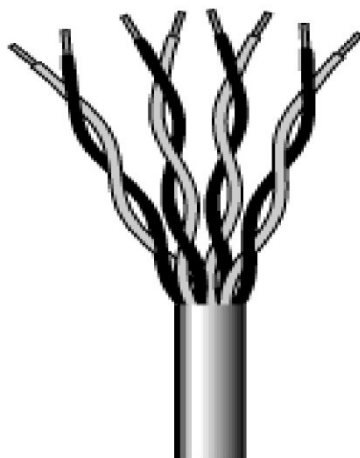
iii. Bandwidth

It's the maximum amount of data that a transmission media can carry at any one time. (1mark)

b. Describe any **three** modes of data communication.

- *Simplex transmission – refers to communication in only one direction*
- *Half duplex – refers to communication in both directions but one direction at a time*
- *Full duplex – in this transmission communication occurs in both directions simultaneously (6 marks)*

c. **Figure 1** shows data transmission media. Study it and use it to answer questions below



i. Identify the name of the transmission media shown in figure

- *Twisted pair* (1 Mark)

ii. State any **three** advantages of using the above mentioned transmission media used in data communication.

- *It is easiest to install, manpower to repair, and service are readily available.*
- *In the mobile system, the signal can traverse various kilometres without amplification.*
- *It can be the least costly for short distances.*
- *If part of a twisted-pair cable is broken, the whole network is not shut down.*
- *It is flexible and easy to connect.*
- *It has a low weight.*

4. a. Define the term software installation

- *refers to copying of computer program into a hard disk of computer in a form that it can be executed by the CPU (1 mark)*

b. State any **two** factors to consider before installing any software?

- *System configurations compatibility*
- *Reading the installation manual*
- *User needs (2 marks)*

c. Explain the steps one can follow to uninstall or remove a program or software and its components in a windows computer.

- *Click Start, and then click Control Panel.*
 - *Under Programs, click Uninstall a program.*
 - *Select the program you want to remove.*
 - *Click Uninstall or Uninstall/Change at the top of the program list then windows will uninstall*
 - *the selected software successfully*
- (4 marks)**

5. a. State any **two** examples of 3G programming languages.

- *Pascal*
- *FOTRAN (FORmula TRANslator)*
- *COBOL: (Common Business – Oriented Language)*
- *BASIC :(Beginners All-purpose Symbolic Instruction Code)*

b. State any **two** disadvantages of high-level language?

- *It takes additional translation times to translate the source to machine code.*
- *High level programs are comparatively slower than low level programs.*
- *Compared to low level programs, they are generally less memory efficient.*
- *Cannot communicate directly with the hardware.*

c. What is the difference between a compiler and an assembler in programming?

- *Compiler - Converts entire source code into object code*
- *Assembler - Converts assembly language into machine readable form*



d. what does the following logic operator mean? (2marks)

- i. AND: *Both sides must be true*
- ii. XOR: *One side or other must be true but not both*

6. a. What does the term troubleshooting mean?

- *Computer troubleshooting is the process of identifying and solving hardware and software related problems*

b. Suppose your PC only shows manufacturer logo and then crashes right before it was supposed to load the operating system. State any two possible problems associated with this.

- *with RAM or hard disk.*
- *Corrupted operating system*

c. State any **two** features/commands found in the backstage view of Ms Publisher?

- New
- Open
- Info
- Save
- Save As
- Print
- Close
- Account

d. Below is an excel window display. Write the possible result besides each formula

	A	B	C
1	3	5	=SUM(\$A\$1:B1) 8
2	2	2	=SUM(\$A\$1:B2) 12
3	1	4	=SUM(\$A\$1:B3) 17
4	2	3	=SUM(\$A\$1:B4) 22
5	4	5	=SUM(\$A\$1:B5) 31
6			
7			
8			

(5 marks)

Section B (45 marks)

There are three questions in this section. Answer all questions in the spaces provided

7. a. Describe the following features of desktop publishing software

- i. *Newspaper column features _this is a feature that helps the user to create a continuous flow of stories or topics as it appears in the newspaper*
- ii. Import text and graphic features



It enables the user to import text and graphics from a wide variety of word processor, CADs software as well as other applications or softwares

iii. WYSIWYG feature

Enables the user to get on the screen an exact preview of what he/she will get as an output even when printed.

b. (6 marks) Explain any three data types used in Microsoft Access database.

- *Text*
- *Number*
- *Date/Time*
- *Boolean*
- *Long text*
- *Currency*
- *AutoNumber*
- *Attachment*
- *Hyperlink*
- *OLE objects*
- *Yes/No (6 marks)*

c. State any three steps to be followed in database design

- *Determine the purpose of your database*
- *Find and organize the information required*
- *Divide the information into tables*
- *Turn information in columns*
- *Specify primary keys*
- *Set up the table relationship*
- *Refine your design*
- *Apply the normalization rules (3 marks)*

8. a. State any **three** advantages of wireless communication?

- *Wireless communication offers mobility, convenience and flexibility*
- *It allows for seamless connectivity without constraint of physical cables*
- *Enabling communication in diverse environments*
- *Wireless communication promotes easier access to information, faster data transmission*
- *It is cost-effective to extend the capability of wired network by integrating wireless segments into communication*

b. Explain any **three** factors to consider when choosing a programming language to use in coming up with a computer program.

- *User requirements*
- *Nature of the program*
- *Program environment*
- *Programming language knowledge*

(6 marks)

b. Describe any three things that will be shown on the output?



- Animated text with words “WELCOME TO MY WEB” running across the screen
 - Heading with words “My first Heading”
 - Paragraph with words “My first paragraph”
 - Pictures or Image with height 230 and width 200
 - Table with two columns for First name and Surname, two 3 rows.
 - List of school items “soap and sugar”
- (6 marks)**

9. a. List any for any **five** categories of excel functions.

- | | |
|----------------------------------|---|
| • <i>Cube functions</i> | • <i>Looking and reference functions</i> |
| • <i>Database function</i> | • <i>Maths and trigonometry functions</i> |
| • <i>Date and time functions</i> | • <i>Statistical functions</i> |
| • <i>Engineering functions</i> | • <i>Text functions</i> |
| • <i>Financial functions</i> | |
| • <i>Information functions</i> | |
| • <i>Logical functions</i> | |

b. Describe any **five** types of errors in Ms Excel.

- ✓ *#DIV/0 - When the denominator is zero the result is not possible*
- ✓ *#N/A - When the required value cannot be found in the cell*
- ✓ *#NAME? – The name is not available in excel and it is regarded as a typal error*
- ✓ *#NULL! - when the range of formula is not determined or it is an empty value*
- ✓ *#NUM! – when the input is an invalid numeric value*
- ✓ *#REF! – when the reference that part of the excel formula are removed*
- ✓ *#VALUE! – when wrong arguments are in the formula*
- ✓ *##### - when the cell width is too small to display the cell contents*
- ✓ *Circular Reference – occurs when a formula in a cell refers to its own cell value directly or indirectly*

(10 marks)

END OF QUESTION PAPER

