

Group A: [Fundamentals – 24 Marks]

1. Answer the following questions. [5 X 2 = 10]

- a. **Software** is a set of programs that tells computer what to do and how to do.

Program is a set of instructions that perform a specified task.

- b. The gradual development of technologies used on a computer is categorized on five distinct phases is called **generation of computer**.

Two unique features of third generation of computers are:

- i. Integrated Circuit was used as main technology.
- ii. Operating speed was measured in terms of nano-seconds.

- c. **Utility Software** is a type of system software that helps in the proper and smooth functioning of a computer system.

Device driver is a software that helps users to interact with the hardware components.

- d. **Compiler** is a computer program (or a set of programs) that transforms source code written in a programming language (the source language) into another computer language (the target language) at once.

Interpreter is a computer program that translates the program written in any language into machine level language line-by-line.

- e. **Computer is called diligence machine** because it can perform tasks repeatedly with same speed and accuracy without being tired.

2. Select the correct option. [4 X 0.5 = 2]

- a. **Footer**
- b. **TREE**
- c. **Fourth Generation of computers**
- d. **4 bits**

3. Fill in the blanks. [4 X 0.5 = 2]

- a. **Analog computer**
- b. **ABC**
- c. **Interpreter**
- d. **Hub**

4. Write either True or False.

[4 X 0.5 = 2]

- a. **True**
- b. **False**
- c. **True**
- d. **True**

5. Write the full form.

[4 X 0.5 = 2]

SMTP = Simple Mail Transfer Protocol

NOS = Network Operating System

UPS = Uninterruptible Power Supply

CAI = Computer Aided Instruction

6. Write the technical term for the following.

[4 X 0.5 = 2]

- a. **Booting**
- b. **UNIVAC - I**
- c. **Application Software**
- d. **Directory**

7. Convert the following as indicated.

[2 X 2 = 4]

- a. $(1001)_2 = (?)_{10} = (\mathbf{9})_{10}$
- b. $(1001 + 111)_2 = (\mathbf{10000})_2$

Group B: [ICT, Ethics and Internet – 10 Marks]

1. Answer the following question. [3 X 2 = 6]

- a. **Computer virus** is a kind of malicious computer program, which when executed, replicates itself and inserts its own code.

Two symptoms of computer virus are:

- i. Missing Files and Programs.
 - ii. Unexpected Pop-up Windows Appearing.
- b. **Network topology** is the structure or pattern of interconnected computers for sharing data and information.

Downloading is process of transferring file or information from a web server to the user's computer.

c. **Benefits of computer network are:**

- i. To share the hardware resources.
- ii. Exchanging data and information.

2. Write the use of following HTML tags. [4 X 0.5 = 2]

- a. To insert a single line break.
- b. To define a paragraph.
- c. To display as a horizontal line that is used to separate content (or define a change) in an HTML page.
- d. To scroll piece of text or image displayed either horizontally across or vertically down your web site page depending on the settings.

3. Match the following. [4 X 0.5 = 2]

Column A

Client

URL

NIC

E-Commerce

Column B

(i) address of particular information on the internet.

(ii) card that physically makes the connection between the computer and the network cable.

(iii) the process of doing business through Internet.

(iv) network computer that utilizes the resources of other network computers.

Group C: [Computer Graphics and Multimedia – 3 Marks]

1. Answer the following questions.

[2 X 1.5 = 3]

- a. To draw a free-form border around a selected object within an image.
- b. **The elements of multimedia are:** Text, Graphics, Audio, Video and Animation.

Group D: [Computer Programming – 13 Marks]

1. Answer the following questions.

[3 X 1 = 3]

- a. **Algorithm** is a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.
- b. **Variable** is a quantity which can store value in computer memory whose value changes during the execution of program.
- c. **The purpose of looping is** to repeat the same, or similar, code a number of times.

2. Write down the output of the following program. [2]

Output:

Sum of natural number is 55

3. Correct the errors in the following program. [2]

Correction on:

REM to check whether the input number is odd or even.

CLS

INPUT "Enter the number"; A

IF A MOD 2 = 0 THEN

PRINT "Even Number";

ELSE

PRINT "Odd Number";

END IF

END

4. Write down the QBASIC program. [2 X 3 = 6]

a. To find the perimeter of a rectangle. $[P = 2(L+B)]$

CLS

INPUT "Enter length: "; l

INPUT "Enter breadth: "; b

P = 2*(l+b)

PRINT "Perimeter of a rectangle is"; P

END

b. To the pattern as below:

1

12

123

1234

12345

CLS

FOR I = 1 TO 5 STEP 1

FOR J = 1 TO I

PRINT J;

NEXT J

PRINT

NEXT I

END

Best Wishes!!!