

# BOARD OF INTERMEDIATE EDUCATION, KARACHI

## H.S.C. Annual Examinations 2021

### (MODEL QUESTION PAPER)

### COMPUTER SCIENCE PAPER-I

Total Duration: 02 Hours

Total Marks: 75

SECTION "A" (M.C.Qs)

Marks: 36

**Note:** Answer All Questions from this section or Compulsory Question-1:-

1. i. Which computers are lower to mainframe computers in terms of speed and storage capacity?
- ◆ Mini Computer
  - ◆ Hybrid Computer
  - ◆ Super Computer
  - ◆ Micro Computer
- ii. Fifth Generation computers are based on
- ◆ Artificial Intelligence
  - ◆ VLSI
  - ◆ Programming Intelligence
  - ◆ Computer Knowledge
- iii. Which of the following is not a type of computer on the basis of operation?
- ◆ Remote
  - ◆ Analog
  - ◆ Hybrid
  - ◆ Digital
- iv. Non -volatile memory is :
- ◆ ROM
  - ◆ Cache
  - ◆ RAM
  - ◆ Flash Memory
- v. The main electronic component used in first generation computers was
- ◆ Transistors
  - ◆ Integrated Circuits
  - ◆ Vacuum Tubes and Valves
  - ◆ Microchip
- vi. The ----- is an electronic pathway used to connect the CPU with every device in a computer?
- ◆ Bus channel
  - ◆ Wire
  - ◆ Track
- vii. ALU stands for:
- ◆ Arithmetic Logic Unit
  - ◆ Application Logic Unit
  - ◆ Array Logic Unit
  - ◆ Arithmetic Located Unit
- viii. CD-ROM stands for
- ◆ Compactable Read Only Memory
  - ◆ Compact Data Read Only Memory
  - ◆ Compactable Disk Read Only Memory
  - ◆ Compact Disk Read Only Memory

ix. The two kinds of main memory are:

- ◆ Primary and secondary
- ◆ ROM and RAM
- ◆ Random and sequential
- ◆ Auxiliary and Hard Disk

x. Impact printers that forms characters using pins in a rectangular or matrix form are called

- ◆ Daisy wheel
- ◆ Ink jet
- ◆ Drum printer
- ◆ Dot matrix

xi. The output quality of a printer is measured by

- ◆ Dots per inch
- ◆ Dots printed per unit time
- ◆ Dots per sq. inch
- ◆ Dots points per inch

xii. TCP/ IP is called

- ◆ Device
- ◆ Receiver
- ◆ Transmitter
- ◆ Protocol

xiii. Select the simplest topology the following.

- ◆ Bus topology
- ◆ Token ring
- ◆ Star
- ◆ Hybrid

xiv. A network is usually privately owned and linked to the devices in a single office, building, or campus.

- ◆ LAN
- ◆ WAN
- ◆ MAN
- ◆ GAN

xv. The Boolean function  $A + BC$  is a reduced form of \_\_\_\_\_

- ◆  $AB + BC$
- ◆  $A'B + AB'C$
- ◆  $(A + B)(A + C)$
- ◆  $(A + C)B$

xvi. DeMorgan's theorem states that \_\_\_\_\_

- ◆  $\overline{(AB)} = \bar{A} + \bar{B}$
- ◆  $\bar{A} + \bar{B} = \bar{A} \bar{B}$
- ◆  $\overline{(A + B)} = \bar{A} * \bar{B}$
- ◆  $\overline{(AB)} = \bar{A} + \bar{B}$

xvii. How many AND gates are required to realize  $Y = CD + EF$  ?

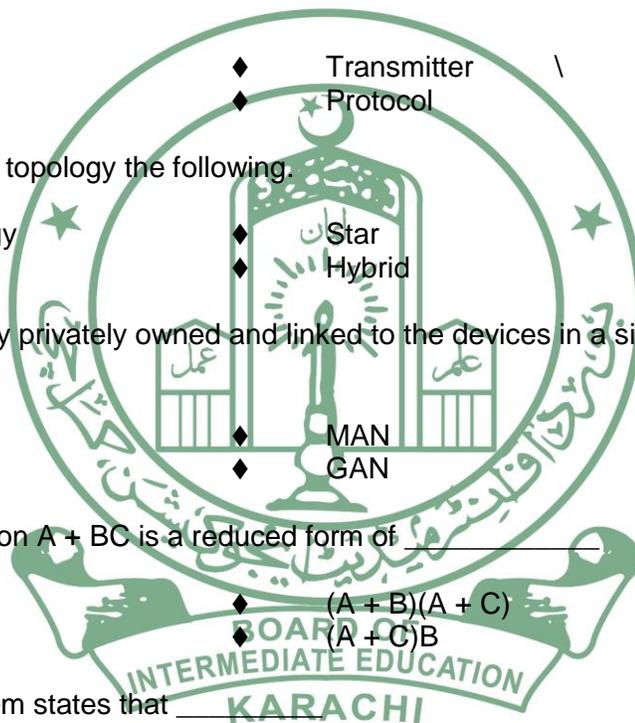
- ◆ 4
- ◆ 3
- ◆ 5
- ◆ 2

xviii. The AND gate has two or more input signals in ones and zeros. What will be the output?

- ◆ 1
- ◆ Both 1 and 0
- ◆ 0
- ◆ 1,0,1

xix. A computer program that converts an entire program into machine language is called a/an

- ◆ Interpreter
- ◆ Simulator



- ◆ Compiler
- ◆ Commander

xx. Programs designed to perform specific tasks is known as

- ◆ System software
- ◆ Application software
- ◆ Utility programs
- ◆ Operating system

xxi. The processing of converting an analog signal to digital signal is called:

- ◆ Modulation
- ◆ Demodulation
- ◆ Line switching
- ◆ WIFI

xxii. Which cable transmits data transmission up to 10 Mbps?

- ◆ Twisted pair
- ◆ Coaxial cable
- ◆ Fiber Optics
- ◆ Microwave

xxiii. A state of communication that allows information to travel in two directions but not simultaneously at a time is called:

- ◆ Full duplex
- ◆ Half duplex
- ◆ Half Simplex
- ◆ Simplex

xxiv. Data is sent one byte at a time over the network in which type of transmission:

- ◆ Synchronous
- ◆ Simplex
- ◆ A Synchronous
- ◆ TV Transmission

xxv. Which of the following computer virus?

- ◆ Worm
- ◆ Trojan horse
- ◆ Time bomb
- ◆ All of them

xxvi. Many organizations use \_\_\_\_\_ to keep their internal network secure while allowing communication with the rest of internet.

- ◆ Firewalls
- ◆ Virus
- ◆ Hardware
- ◆ Graphics

xxvii. A computer application whereby messages are transmitted via data communications to electronic mailbox is called:

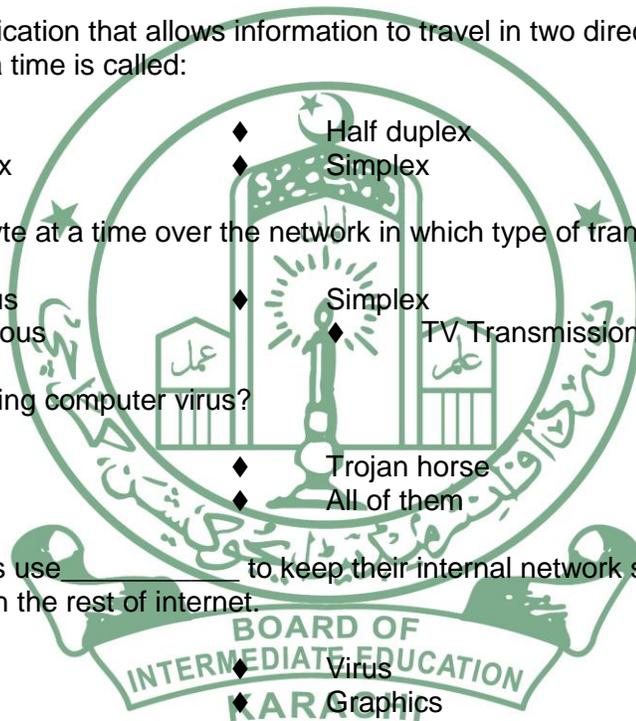
- ◆ Telephone
- ◆ E-mail
- ◆ Fax
- ◆ Hardcopy

xxviii. The term Gigabyte refers to

- ◆ 1024 bytes
- ◆ 1024 kilobytes
- ◆ 1024 megabytes
- ◆ 1024 gigabyte

xxix. An application program that helps the user to calculate any number by the formulas and immediately see the result of that change is called:

- ◆ Desktop publishing program
- ◆ Database





- x. Define digital and analogue signals.

### **SECTION-C DETAILS ANSWERS QUESTIONS**

**(14 Marks)**

**Note:- Attempt any Two Questions from this section.**

3. Define software? Explain System Software and Application Software.
4. What is meant by Topology? Describe and Name any three network topologies with diagram.
5. Write the names of commonly used input and output devices. Discuss at least three types of input devices.
6. What is Computer? Discuss its components.

