

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
 - ◆ Digital
 - ◆ Hybrid
- 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:

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

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

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

xi. The output quality of a printer is measured by

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

xii. TCP/ IP is called

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

xiii. Select the simplest topology the following.

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

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

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|-------|-------|
| ◆ LAN | ◆ MAN |
| ◆ WAN | ◆ GAN |

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

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

xvi. DeMorgan's theorem states that _____

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

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

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|-----|-----|
| ◆ 4 | ◆ 5 |
| ◆ 3 | ◆ 2 |

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

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

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

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|---------------|-------------|
| ◆ 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.

