

**ESKPXI-XXV (I)**  
**COMPUTER SCIENCE PART-I**

**Time Allowed: 3 Hrs**

**Marks: 75**

**Note:** There are **Three Sections** in this paper i.e. A, B and C. Attempt Section-A and return it to the Superintendent within the given time. No marks will be awarded for **Cutting, Erasing and Overwriting.**

**Mobile Phone is strictly prohibited in Examination Hall.**

**Time: 20 Minutes**

**SECTION "A"**

**Marks: 15**

**Q.1.** Choose the correct option and shade one of (A, B, C, D) in the given **Bubble Answer Sheet.**

- i.** The department for which Herman Hollerith developed a tabulating machine is:  
(A) U.S Research                      (B) U.S Health                      (C) U.S Defense                      (D) U.S Census
- ii.** Recognizing input from keyboard and sending output to the display unit, is the responsibility of:  
(A) Operating System                      (B) Device Driver                      (C) Utility Software                      (D) Language Processor
- iii.** A fixed size group of bits that is handled together is:  
(A) Nibble                      (B) Byte                      (C) Kilo byte                      (D) Memory word
- iv.** A memory that is used to improve overall system speed is:  
(A) Register                      (B) Cache                      (C) RAM                      (D) SDD
- v.** For simultaneous calculations CPU should have more than one \_\_\_\_\_ :  
(A) ALU                      (B) CU                      (C) Cache L1                      (D) Cache L2
- vi.** CPU places the instructions waiting for processing in:  
(A) Main memory                      (B) Auxiliary memory                      (C) ROM                      (D) Hard disk
- vii.** A circuit board that is used to provide connectivity between all other hardware components is:  
(A) Network interface card                      (B) MODEM                      (C) Main board                      (D) Expansion board
- viii.** A physical interface through which data is transferred (in/out) only one Bit at time is:  
(A) PS/2 port                      (B) LPT port                      (C) Parallel port                      (D) Serial port
- ix.** All of the following are the basic components of data communication, except:  
(A) Computer                      (B) Medium                      (C) Receiver                      (D) Sender
- x.** Data is transferred byte-by-byte or character by character in:  
(A) Duplex transmission                      (B) Synchronous transmission                      (C) Asynchronous transmission                      (D) Simplex transmission
- xi.** Routers work on \_\_\_\_\_ layer.  
(A) Session                      (B) Presentation                      (C) Network                      (D) Transport
- xii.** One of the following is a wireless communication technology:  
(A) Fiber Optic                      (B) Twisted Pair                      (C) Coaxial                      (D) Microwave
- xiii.** Roll number in a relation is an example of \_\_\_\_\_  
(A) Attribute                      (B) Record                      (C) Row                      (D) Tuple
- xiv.** The collection of records in a database is:  
(A) Access                      (B) SQL Server                      (C) Open Office Base                      (D) Table
- xv.** The maximum size of the large number is of \_\_\_\_\_ byte.  
(A) 4                      (B) 8                      (C) 12                      (D) 16

**ESKPXI-XXV (I)**  
**COMPUTER SCIENCE PART-I**

**Time: 2 Hours 40 Minutes**

**SECTION "B"**

**Marks: 36**

**Q.2. Give short answers to any NINE (09) questions. All questions carry equal marks.**

- i. Define Microcomputers also write any three features of desktop computers.
- ii. Why cache memory is important for CPU?
- iii. Write any four key features of hard disk drive.
- iv. Describe at least TWO features of Ax and Bx.
- v. Define system unit. What are its components? Which component of system unit is responsible to provide power to other hardware components and how?
- vi. Why cooling system is important for computer system? Write any three reasons.
- vii. Differentiate between Sender and Receiver. Also give examples of each.
- viii. Describe any four features of Radio waves.
- ix. Describe features of Wifi in terms of wave technology, speed, area and standards.
- x. Define DBMS. Write down any THREE uses of DBMS for data Manipulation.
- xi. How you can describe that following are the advantages of DBMS?
  - a) Minimum Data Redundancy
  - b) Data Administration
- xii. What are the steps to insert new record in a table?

**SECTION "C"**

**Marks: 24**

**Note: Attempt any THREE (03) questions from the following. Each question carries equal marks.**

- Q.3.** Explain productivity software and educational software with the help of example.
- Q.4.** Explain the following CPU instructions:
  - a) LD
  - b) SUB
  - c) OR
  - d) DECREMENT
- Q.5.** How coaxial cable, twisted pair and optical fiber cable differs from each other in terms of structure, bandwidth and usage?
- Q.6.** What is data modeling? Write its uses and also draw the symbols that are used in ERD for different elements of ERD.