INTERNAL ASSIGNMENT

**Course Code:** 23OBC101 **Assignment No:** 2

**Course Title:** Computational Thinking and Fundamentals of IT

**Last Date of Submission:** 15 JAN 2024 **Maximum Marks:** 30

1. The assignment will have two parts, A and B. Part A is of 10 MCQ-type Questions of 1 mark each.
2. Part B is of 20 Marks having 8 Descriptive Questions. Attempt any 5 out of them.

**Part-A (10 x 1 = 10 Marks)**

|  |  |  |
| --- | --- | --- |
| **Q.No.** | **Question** | **CO** |
| 1 | The layout of \_\_\_\_\_\_\_\_\_ is just like the traditional typewriter of the type QWERTY. | 3 |
| Ans key | 1. Keyboard 2. Mouse 3. Printer 4. Scanner |
| 2 | An input device that can electronically capture an entire page of text or images such as photographs or artwork is called \_\_\_\_\_\_\_\_\_\_\_. | 3 |
| Ans key | 1. Keyboard 2. Mouse 3. Printer 4. Scanner |
| 3 | Which storage method is suitable for caching and real-time applications, using a key-value pair model? | 4 |
| Ans key | 1. MongoDB 2. Amazon S3 3. Redis 4. None of these |
| 4 | Which type of ROM can be programmed after manufacturing and used for embedded systems | 4 |
| Ans key | 1. PROM 2. EEPROM 3. EPROM 4. None of these |
| 5 | Which type of software is responsible for converting high-level programming languages into machine code? | 4 |

|  |  |  |
| --- | --- | --- |
| Ans key | 1. Compilers 2. Interpreters 3. Utility programs 4. Operating systems |  |
| 6 | What is the primary focus of utility programs? | 4 |
| Ans key | 1. Managing hardware resources 2. Enhancing system performance 3. Running application software 4. Designing user interfaces |
| 7 | The \_\_\_\_ is always the sign bit and the remaining bits represent the magnitude. | 5 |
| Ans key | 1. Base 2. MSB 3. LSB 4. None of these |
| 8 | A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is any arrangement where a sender transmits a message to a receiver over a channel with a medium. | 5 |
| Ans key | 1. Operating System 2. Communication Network 3. Both (A) & (B) 4. None of these |
| 9 | \_\_\_\_\_\_\_\_\_\_\_\_ connects two or more computers that are apart but reside in the same or different cities. | 5 |
| Ans key | 1. Local Area Networks (LAN) 2. Wide Area Network (WAN) 3. Metropolitan Area Network (MAN) 4. None of the above |
| 10 | \_\_\_\_\_\_\_\_\_\_\_\_ is a collection of protocols that governs the data transfer from one machine to another across networks. | 5 |
| Ans key | 1. TCP/IP 2. FTP 3. HTTP 4. telnet |

**Part B Answer any 5 Questions (5 X 4 = 20)**

|  |  |  |
| --- | --- | --- |
| **Q.No.** | **Questions** | **CO** |
| 1 | Summarize the various applications of a computer. | 3 |
| 2 | Explain the generations of computer. | 3 |
| 3 | Categorize various secondary storages. | 4 |
| 4 | Explain different primary storages. | 4 |
| 5 | Summarize: Assembly Language, High-Level Language and Machine Language. | 4 |
| 6 | Differentiate LAN, MAN, and WAN. | 5 |
| 7 | Summarize TCP/IP protocol. | 5 |
| 8 | Illustrate components of data communication. | 5 |