**GATE LEVEL MCQ QUIZ FOR ADVANCED LEARNERS**

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| **Name of the student** |  | | |
| **USN:** |  | | |
| **Marks Obtained:** |  | **Semester:** | **03** |
| **Max. Marks** |  | **Date:** |  |
| **Student Signature** |  | **Academic Year:** |  |

**Note:** Answer all the questions. Each question carries **One Mark.**

1. When an expression consists of int, double, long, float, then the entire expression will get promoted into a data type that is:

a. float b. double

c. int d. long

**Answer:** **b**

2. Out of these methods of the String class, which one can be used for testing the strings for equality?

a. isequals() b. isequal()

c. equals() d. equal()

**Answer:** **c**

3. Out of these packages, which one contains an abstract keyword?

a. java.util b. java.lang

c. java.system d. java.io

**Answer:** **b**

4. Which of these components are used in a Java program for compilation, debugging, and execution?

a. JDK b. JVM

c. JRE d. JIT

**Answer:** **a**

5. When a process is in a “Blocked” state waiting for some I/O service. When the service is completed, it goes to the \_\_\_\_\_\_\_\_\_\_

a) Terminated state b) Suspended state

c) Running state d) Ready state

**Answer: d**

6.  In Unix, which system call creates the new process?

a) create b) fork

c) new d) none of the mentioned

**Answer: b**

7. FIFO scheduling is a type of:

1. Pre-emptive scheduling b) Non-pre-emptive scheduling.

c) Deadline scheduling d) none of the above

**Answer: b**

8. What are the two types of operating modes of AT?

a) Virtual mode, dedicated mode b) Private mode, public mode

c) Real mode, protected mode d) Direct mode, indirect mode

**Answer: c**

9. Which of the following is a linear data structure?

a) Array b) AVL Trees

c) Binary Trees d) Graphs

**Answer: a**

10. How are String represented in memory in C?

a) An array of characters. b) The object of some class.

c) Same as other primitive data types. d) LinkedList of characters.

**Answer: b**

11. The number of swapping needed to sort the numbers 8,22,7,9,31,5,13 in ascending order using bubble sort is

a) 11 b) 12

c) 13 d) 10

**Answer: b**

12. Which of the following is the advantage of the array data structure?

a) Elements of mixed data types can be stored.

b) Easier to access the elements in an array

c) Index of the first element starts from 1.

d) Elements of an array cannot be sorted

**Answer: b**

13. What is the basic unit of digital data?

A) Byte B) Bit

C) Nibble D) Word

**Answer: b**

14. What is the binary equivalent of the decimal number 10?

A) 1010 B) 1100

C) 1001 D) 1111

**Answer: a**

15. How many digits are in the hexadecimal number system?

A) 8 B) 10

C) 16 D) 12

**Answer: C**

16. Which of the following is a sequential logic device?

A) Multiplexer B) Decoder

C) Flip-flop D) Half Adder

**Answer: C**

17. What is the primary function of the CPU in a computer system?

A) Input data from peripherals B) Store data temporarily

C) Process data and execute instructions D) Display output to the user

**Answer: C**

18. Which component of a CPU is responsible for performing arithmetic and logical operations?

A) Control Unit B) ALU (Arithmetic Logic Unit)

C) Cache Memory D) Registers

**Answer: B**

19. Which of the following is NOT a type of secondary storage device?

A) Hard Disk Drive (HDD) B) Solid State Drive (SSD)

C) USB Flash Drive D) RAM (Random Access Memory)

**Answer: D**

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A) Hard Disk Drive (HDD) B) Solid State Drive (SSD)

C) USB Flash Drive D) RAM (Random Access Memory)

**Answer: D**