SAM HIGGINBOTTOM UNIVERSITY OF AGRICULTURE, TECHNOLOGY AND SCIENCES

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY, VIAET

END-TERM EXAMINATION, DECEMBER 2021

B.Tech-CSE, Ist Semester

COURSE CODE: CSIT-308   TIME: 2 Hrs.

COURSE TITLE: Problem Solving & Programming in C   **MARKS: 100**

Note: Attempt all the questions. Your answers should be accurate and precise.

Fill in the blanks: **(2 x 5 = 10)**

Q1. Which operator in C is called as assignment operator _____.

Q2. Operating system acts as interface between user and _____.

Q3. Array are used to allocate memory _____.

Q4. The address of a variable is obtained by _____ operator.

Q5. In C language x - = y + 1; means as _____

Multiple Choice Questions: **(2 x 5 = 10)**

Q6. The C programs are converted into assembly language using
     a) an assembler   b) a compiler   c) an interpreter   d) an operating system

Q7. In a array X[10] the X represents the
     a) base address   b) base value   c) void pointer   d) none of the above

Q8. The array combines variables of
     a) dissimilar data types b) similar data types c) unsigned data types   d) none of these

Q9. Which is the correct way to declare a pointer
     a) int *ptr   b) *int ptr   c) int ptr*   d) int_ptr x

Q10. Each case statement in switch() is separated by
     a) break   b) continue   c) exit()   d) goto

True/False: **(1 x 5= 5)**

Q11. Logical errors will be detected by the compiler.
Q12. A Function can call another function.
Q13. Then is a reserved word in C language.
Q14. The % (modulus operator) cannot be applied with floating point operands.
Q15. Two-dimensional array is also called matrix.

Short Answer Type Questions: (5 x 5= 25)

Q16. Differentiate between machine, assembly and high-level language.

Q17. Explain different types of operator supported by C.

Q18. Write a program to read any ten and display the number using array.

Q19. Write short notes on file handling.

Q20. Define sorting. Write key points of selection sort.

Long Answer Type Questions: (50 Marks)

Q21. What is dynamic memory allocation? What are the various dynamic memory
   allocation functions? **[7]**

Q22. Write a program to swap two numbers using third variable. **[7]**

Q23. What is a pointer? What is its use? What are the features of a pointer? **[9]**

Q24. What is the difference between while loop and do while loop with example? **[9]**

Q26. What do you understand by C Token? Explain with example. **[9]**

Q25. What is a function ? What do you mean by the following:
   1) Function declaration 2) Function calling 3) Function definition **[9]**