S.S.R. DEGREE COLLEGE,(AUTONOMOUS) NIZAMABAD
II SEMESTER INTERNAL ASSESSMENT II EXAMINATIONS
B.Com PROGRAMMING WITH C
QUESTION BANK

1. Which of the following is the correct way to declare a function in C?

a) `void function() {}`
b) `function() void {}`
c) `void function[];`
d) `function(void) {}`

Answer: a) `void function() {}`

2. What is the purpose of the `return` statement in a function?

a) To terminate the function
b) To pass a value back to the calling function
c) To initialize variables
d) To display a message

Answer: b) To pass a value back to the calling function

3. Which type of function does not return any value?

a) `void` function
b) `int` function
c) `char` function
d) `float` function

Answer: a) `void` function

4. Which of the following is an example of a function call by value in C?

a) `swap(x, y);`
b) `swap(&x, &y);`
c) `swap(x, &y);`
d) `swap(x, y);` (assuming x and y are simple variables)

Answer: d) `swap(x, y);`

.5. **What is the correct syntax to declare a pointer to an integer in C?**

a) `int* ptr;`
b) `ptr* int;`
c) `pointer int;`
d) `int ptr;`

Answer: a) `int* ptr;`

6. What does the `&` operator do in C?

a) It returns the value stored at a given memory address.
b) It returns the memory address of a variable.
c) It is used to declare pointers.
d) It adds two variables together.

Answer: b) It returns the memory address of a variable.

7. Which of the following expressions correctly assigns the value of `x` to the variable `y` using pointers?

a) `y = &x;`
b) `*y = x;`
c) `*y = &x;`
d) `y = *x;`

Answer: b) `*y = x;`

8. What does the `tolower()` function do in C?

a) Converts a character to uppercase.
b) Converts a character to lowercase.
c) Converts a character to a number.
d) Checks if a character is alphabetic.

Answer: b) Converts a character to lowercase.

9. Which of the following functions checks if a character is an alphabetic letter (either uppercase or lowercase)?

a) `isdigit()`
b) `isalpha()`
c) `isalnum()`
d) `isxdigit()`

Answer: b) `isalpha()`

10. Which function in C is used to calculate the length of a string?

a) `strlength()`
b) `strlen()`
c) `string_len()`
d) `strlen_length()`

Answer: b) `strlen()`

11. Which of the following functions is used to concatenate two strings in C?

a) `strcat()`
b) `stradd()`
c) `strappend()`
d) `strjoin()`

Answer: a) `strcat()`

12. What is the purpose of an inline function in C?

a) To reduce memory usage
b) To improve the performance by reducing function call overhead
c) To handle recursion efficiently
d) To define a function that cannot be called outside its file

Answer: b) To improve the performance by reducing function call overhead

13.Which of the following functions is used to allocate memory dynamically in C?

a) `malloc()`
b) `calloc()`
c) `free()`
d) `realloc()`

Answer: a) `malloc()`

14. What is recursion in C?

a) A function that calls itself
b) A function that never terminates
c) A function that cannot return values
d) A function that calls another function

Answer: a) A function that calls itself

15. Which of the following is the correct way to access a member of a structure in C?

a) `structure.member`
b) `structure->member`
c) `structure[]`
d) `member.structure`

Answer: a) `structure.member`

16. What is the size of a union in C?

a) The size of the largest member of the union.
b) The sum of the sizes of all members of the union.
c) The size of the smallest member of the union.
d) The size of the union depends on the number of members.

Answer: a) The size of the largest member of the union.

17. Which of the following is a valid declaration of a structure in C?

a) `struct person { char name[50]; int age; };`
b) `union person { char name[50]; int age; };`
c) `structure person { char name[50]; int age; };`
d) `struct person ( char name[50], int age );`

Answer: a) `struct person { char name[50]; int age; };`

18. What is the size of a union in C?

a) The sum of the sizes of all its members.
b) The size of the largest member.
c) The size of the smallest member.
d) The average size of all members.

Answer: b) The size of the largest member.

19. Which function is used to write a structure to a file in binary format in C?

a) `fwrite()`
b) `fprintf()`
c) `fscanf()`
d) `fputs()`

Answer: a) `fwrite()`

20. Which function is used to open a file in write mode in C?

a) `open()`
b) `fopen("filename", "w")`
c) `fileopen()`
d) `openfile("filename", "w")`

Answer: b) `fopen("filename", "w")`

1. What does OOPS stand for? (a)
   a) Object Oriented Programming System
   b) Object Oriented Program Structure
   c) Object Oriented Programming Style
   d) Object Oriented Programming System Software
2. **What is an object in C++?** (c)
   a) A variable
   b) A function
   c) An instance of a class
   d) A data type
3. **What is runtime polymorphism achieved through?** **(c)**

   a) Function overloading
   b) Operator overloading
   c) Virtual functions
   d) Templates

4. **Function overloading is an example of** **(c)**
   a)Encapsulation
   b) Inheritance
   c) Compile-time polymorphism
   d) Run-time polymorphism
5. **Which OOPS concept allows reusability of code?** **(d)**

   a) Encapsulation
   b) Polymorphism
   c) Abstraction
   d) Inheritance

II . Fill in the Blanks:

1. The function declaration includes the function's return type, its _____ list, and its function name.
Answer: **`parameter`**

2. In C, when a function calls itself, it is called _____.

Answer: `recursion`

3. A function defined outside of the `main()` function and can be accessed by any part of the program is called a _____ function.

Answer: `global`

4. In Call by Value, the actual argument's value is copied to the _____ parameter of the function.

Answer: `formal`

5. In a _____, all members share the same memory location, and the size of the union is determined by the size of its largest member.

Answer: `union`

6. A _____ in C is used to group different types of data together under one name.

Answer: `structure`

7. In a structure, each member has its own _____ and the total size of the structure is the sum of the sizes of all its members.

Answer: `memory location`

8. To access a member of a structure using a pointer, you must use the _____ operator.

Answer: `->`

9. One of the limitations of Call by Value is that the function cannot modify the _____ argument values.

Answer: `actual`

10. An `enum` in C is a user-defined data type that consists of a set of _____ values.

Answer: `named`

11. By default, the first enumerator in an enum is assigned the value _____.

Answer: `0`

12. If you pass a structure to a function in C, it is passed by _____ by default.

Answer: `value`

13. In C, the function used to open a file is _____.

Answer: `fopen`

14. The function _____ is used to close an opened file in C.

Answer: `fclose`

15. To check if the end of a file (EOF) has been reached during file reading, you can use the function _____.

Answer: `feof`

16. In C, a text file stores data in a _____ format, where each character is represented by its ASCII code.

Answer: `human-readable`
Explanation: Text files store data in a human-readable format, where each character is stored as its ASCII (or Unicode) value. These files can be opened and viewed using a standard text editor.

17. To open a file for reading in binary mode in C, you would use the mode _____.

Answer: `"rb"`

18. In C, when opening a text file, each line is terminated by a _____ character, which is represented as `\n`.

Answer: `newline`

19. A pointer in programming is a variable that stores the address of another variable.
Answer: address

20. In C/C++, the operator used to declare a pointer is the asterisk (*) operator.
Answer: asterisk (*)

21.OOPS stands for_____

Answer : Object Oriented Programming System

22. A class is a _____of objects

Answer: Blueprint

23. An object is an _____of a class.

Answer: Instance

24.The keyword used to define a class in C++ is _____

Answer : class

25. The data members and member functions of a class are accessed using the_____ operator.

Answer : Dot (.)

III. Descriptive Questions

1. Explain Breifly about Functions and types of functions

2. Explain briefly about call by value and call by Reference

3.What is inline function .explain with example

4.Explain About File and File operations

5.Explain about structures and unions with example