**Question Bank**

**Unit I**

1. What is a computer? With a neat diagram, discuss the organization of a computer (5) 2+1+2
2. Elaborate the different components of computer hardware
3. Write a note on Bus Interface Unit in detail
4. Write a short note on Input/Output Devices
5. Explain system software in detail
6. Give the differences between application software and system software
7. Whis is an operating system? Give examples
8. List and explain the function of BIOS
9. Explain Compiler, Interpreter, Linker, and Loader
10. With a neat diagram elaborate the process of design and implementation of efficient software programs
11. What are the different Program design tools available? Explain
12. What is an algorithm? What are its characteristics
13. Discuss the importance of flowchart in detail
14. What are the different shapes used in designing a flowchart? Give examples
15. Explain a pseudocode
16. Give the differences between pseudocode and algorithm
17. Write an algorithm to find whether the given year is leap or not
18. Draw a flowchart to find whether th person is eligible to Vote or not
19. Draw a flowchart to print the multiplication table of N (N should be an user input)
20. Write a pseudocode to swap two numbers

**Note : Practice different examples for writing algorithm, pseudocode and drawing flowchart. Questions 17-20 are only Example problems**

**Unit II**

1. List and explain the different features of C
2. Justify why C is considered as a Middle Level Language
3. Explain the structure of a C program with an example
4. List and explain any 5 header files with example
5. How do we compile and run a C Program
6. Give the differences between Compile Error and Runtime Error
7. Elaborate C Tokens in detail
8. What is an identifier? List the different rules to define an identifier. Give examples
9. Write a short note on the basic data types in C
10. Give the range and size of different data types in C
11. Write a program to print the message “Welcome to RV” in C
12. Write a program to perform (i) add (ii) Subtract (iii)multiply and (iv) divide two numeric variables and display the output in C

**[Similar simple programs to be practiced]**

1. Discuss the (i) Arithmetic (ii)Logical and (iii)Relational operators in C with Example
2. Explain the working of bitwise operators in detail
3. Explain operator precedence in detail
4. With example any five-escape sequence characters that help to format the output in C
5. What is typecasting and how is it useful?
6. How do type conversion work in C ? Give an example
7. Explain increment and decrement operators in C with relevant example
8. What is role of local and global variables in C? Give examples

**Unit III**

1. Give the differences between sequence control, decision control and looping control statements. Give example.
2. Elaborate the working of If-Else statement in C with syntax and Example
3. Explain the if-else ladder with an example
4. What is a ternary operator? Give example
5. Give the differences between if-else and switch case
6. With relevant example give the differences between do-while and while loop
7. Discuss the role of goto, continue and break and detail
8. What are the different looping structures in C? Give examples
9. Summarize the differences between Entry controlled and Exit controlled loop
10. Explain the working of nested for loop in detail
11. Define an array? How do you declare and initialize a one-dimensional array in C?
12. Explain the working of two-dimensional arrays with an example

**# Relevant programming examples to be practised**