

SSR DEGREE COLLEGE (NIZAMABAD)
UNIT WISE IMPORTANT QUESTIONS
SEM – II
Programming with C (B.COM)

UNIT – I: Computer Fundamentals , Algorithm and Basics of C

Important Questions:

1. Define computer. Explain the classification of computers.
2. What is an operating system? Describe its functions.
3. Explain the Block diagram of computer/Operational overview.
4. What are programming languages? Explain generations and classification.
5. Distinguish between compiling, interpreting, loading, and linking.
6. What are the steps involved in developing a program?
7. **Define an algorithm. What are the characteristics of a good algorithm?**
8. **Explain Structure of a c program with an example**
9. **What are tokens in C? Explain keywords, identifiers, constants, and operators.**
10. **Explain data types in C with examples.**
11. **What is type conversion? Differentiate implicit and explicit casting.**
12. **Explain briefly about expression evaluation and its precedence.**

✓ UNIT – II: Input / Output, Control Statements, Arrays & Strings

Important Questions:

1. Differentiate between formatted and non-formatted I/O functions.
2. Explain the use of `printf()` and `scanf()` with examples.
3. What are escape sequences? List any 5 with meanings.
4. Write a C program to check if a number is prime.
5. Write a C program to find the sum and average of an array.
6. Write a program to reverse a string.
7. **Explain selection control statements: `if`, `if-else`, `nested if-else`, `switch`.**
8. **Explain `while`, `do-while`, and `for` loops with flowcharts and examples.**
9. **Differentiate between `break`, `continue`, and `goto` statements.**
10. **What is an array? Explain about types of arrays with examples?**
11. **Explain character arrays and string functions (`strlen`, `strcpy`, `strcmp`, `strcat`) from `string.h`.**

✓ UNIT – III: Functions & Pointers

Important Questions:

1. Explain about different types of functions
2. How to pass arrays to functions? Write an example.
3. Write a program to swap two numbers using pointers.
4. Explain pointer to pointer and pointer to array with diagrams.
5. Explain call-by-value and call-by-reference with examples.
6. Write a recursive function to calculate factorial.
7. What is the scope and lifetime of a variable in C?
8. Explain the different storage classes in C.
9. What is a pointer? Explain pointer declaration and initialization.
10. What is a function? Explain different parts of function.
11. What is dynamic memory allocation? Explain `malloc()`, `calloc()`, and `free()`.

✓ UNIT – IV: Structures, Unions, and File Handling

Important Questions:

1. Write a program using structures to store student data (roll, name, marks).
2. How to access members of a structure using a pointer?
3. What is a union? How is it different from a structure?
4. Write a C program to copy content from one file to another.
5. How to use `fgets()` and `fputs()` for file input and output?
6. Explain file access modes (`r`, `w`, `a`, `r+`, etc.).
7. What is a structure in C? How do you declare and use it?
8. Compare structure and union with examples.
9. What is an enumerated type? Give an example of its usage.
10. Explain file handling functions in C: `fopen()`, `fclose()`, `fprintf()`, `fscanf()`.
11. Differentiate between text and binary files.