



Managed by Jivan Jyot Trust, Amroli

**PROF. V. B. SHAH INSTITUTE OF MANAGEMENT | R. V. PATEL COLLEGE OF COMMERCE (ENG. MED.),  
V. L. SHAH COLLEGE OF COMMERCE (GUJ. MED.) | SUTEX BANK COLLEGE OF COMPUTER APPLICATIONS & SCIENCE, AMROLI.**

Accredited by National Assessment and Accreditation Council with 'B' Grade

All colleges are Affiliated to Veer Narmad South Gujarat University, Surat

## B.Sc. (I.T.) / M.Sc. (I.T.) 1s Semester

Course: 104: Fundamentals of Programming Using C-1

**SHORT and LONG QUESTIONS (UNIT-WISE)**

### **SHORT QUESTIONS (UNIT-WISE)**

Perfect for 3–4 marks.

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#### **UNIT 1**

1. Define algorithm. List its characteristics.
  2. What is flowchart? Name its symbols.
  3. Differentiate between compiler and interpreter.
  4. What is a variable? Give example.
  5. Write the advantages of high-level languages.
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#### **UNIT 2**

1. Features of C language.
  2. What is token? List types of tokens.
  3. Explain printf() with example.
  4. What is escape sequence? Give any four examples.
  5. What is a data type? Explain primary data types.
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#### **UNIT 3**

1. Explain arithmetic and logical operators.
  2. Differentiate between if and switch.
  3. What is a loop? Explain while loop.
  4. What is break and continue?
  5. Explain increment and decrement operators.
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#### **UNIT 4**

1. Define array. What are its advantages?
  2. Explain 1-D array with example.
  3. What is matrix? How 2-D array is stored in memory?
  4. Write algorithm for linear search.
  5. Explain insertion operation in array.
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#### **UNIT 5**

1. Define string. How it is stored?
2. Differences between char array and string.
3. Explain strlen(), strcat() functions.
4. Write syntax of string declaration and initialization.
5. Explain array of strings with example.



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### **LONG QUESTIONS (UNIT-WISE)**

Perfect for 7-14 marks.

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#### **UNIT 1**

1. Explain algorithm and flowchart with suitable examples.
  2. Describe the programming process in detail.
  3. Write short notes on: Compiler, Interpreter, Translator.
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#### **UNIT 2**

1. Explain structure of C program with example.
  2. Explain various data types and their memory representation.
  3. Explain input/output library functions with examples.
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#### **UNIT 3**

1. Explain control structures in C with examples.
  2. Differentiate between while, do-while and for loop.
  3. Explain nested control structures with example programs.
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#### **UNIT 4**

1. Explain creation, initialization and processing of 1-D array.
  2. Explain matrix operations with example programs.
  3. Explain all array manipulation operations with examples.
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#### **UNIT 5**

1. Explain string handling functions in detail.
2. Explain array of strings and demonstrate using a C program.
3. Explain string input/output operations with examples.