# DMI COLLEGE OF ENGINEERING 

Chennai 600123<br>QUESTION BANK (2014-2015)<br>(Common To All Branches of B.E. / B. Tech)<br>SEMESTER - I<br>GE6151 - Computer Programming

## UNIT I

## PART-A (2 marks)

1. What is a computer program?
2. Define Software and hardware.
3. List some important hardware and software technologies of fifth generation computers.
4. What are the basic operations of computer?
5. Give the full form of ENIAC and EDVAC.
6. Distinguish between Analog and Digital Computer.
7. Define an Operating System. Give example.
8. Differentiate Compiler and Interpreter.
9. Convert the $(756)_{10}$ to octal and hexa decimal.
10. How will u convert CAB in hexadecimal to binary?
11. Differentiate RAM and ROM.
12. What are Registers?
13. Define: Algorithm.
14. Enlist the advantages of algorithm.
15. What is flowchart?
16. What is pseudocode?
17. Write four characteristics of pseudocode.
18. Mention the advantages of flowcharting.
19. Draw a flowchart to find the maximum among three numbers.
20. What do u meant by ASCII?

## PART - B (16 marks)

1. Explain in detail about the classification of computers with examples.
2. Explain in detail about the different generations of computers.
3. With the help of neat sketch explain the computer organization in detail.
4. Describe the various memories used in computer.
5. With examples illustrate the conversion of Decimal to Binary, Octal and Hexadecimal numbers.
6. Explain the need for an algorithm and also explain the characteristics and qualities of a good algorithm.
7. i) Write an algorithm to find the largest of three numbers (8)
ii) Write an algorithm to convert percent grades into letter grades. Use the following table for conversion

| $100 \%-80 \%$ | A |
| :--- | :--- |
| $79 \%-70 \%$ | B |
| $69 \%-60 \%$ | C |
| $59 \%-50 \%$ | D |
| Below $50 \%$ | E |

8. Explain the diagram symbols used in flowchart and the basic design structures in flow chart.
9. i) Draw a flowchart to check whether the given number is prime or not.
ii) Draw a flowchart to find the greatest of three numbers.
10. Explain the sequence logic, selection logic and iteration logic design structure in pseudocode.

## UNIT II

## PART A (2 marks)

1. What are the features of a good programming language?
2. What are the difference between constant and variable?
3. Write any four escape sequences in "C".
4. What is Scope of a variable? List the two types of Scopes of a variable in 'C' language?
5. What are the various types of operators supported by C ?
6. List any four short-hand assignment operator.
7. What is delimeters? List out the delimeters supported by C?
8. Differentiate between Logical and Relational expressions.
9. What is the ternary operator? Give an example.
10. What is increment and decrement operator? List out the increment and decrement operators supported by C .
11. What is formatted and unformatted input/output functions?
12. Differentiate between signed and unsigned integer.
13. What is the significance of WHILE statement in C?
14. Distinguish between while... and do...while statement.
15. What is the use of "break" statement in C ?
16. What is the use of "continue" statement?
17. Differentiate between getchar() and $\operatorname{scanf}()$ functions.
18. What are the rules for writing $\operatorname{scanf}()$ function?
19. Write a ' C ' program to implement the expression $((\mathrm{m}+\mathrm{n}) / \mathrm{p}-\mathrm{m})$, where $\mathrm{m}=4, \mathrm{n}=6$, $\mathrm{p}=8$.
20. Write the syntax of "for" loop.

## PART B (16 marks)

1. Explain the structure of C program.
2. Explain the purpose of storage classes auto, extern, static and register with suitable example.
3. With example describe the structure of
(i) if-else statement
(ii) Nested if...else statement
(iii) switch statement
in C language.
4. Describe the looping statements in C with examples.
5. Explain in detail about the Expressions using operators in C.
6. Write the C program to perform the following tasks using switch case Case 1: Find the given number is prime or not
Case 2: Find the given number is Amstrong number or not Case 2: Exit
7. Explain about the various decision making statements in 'C' language.
8. Explain in briefly about the input and output function in C.
9. Explain the standard string functions with example to support each type.
10. Explain briefly the formatted and unformatted I/O functions in C with examples.
