

# MLR INSTITUTE OF TECHNOLOGY

(Autonomous Institute)

I B.Tech I Sem Supplementary/Improvement Examinations, February-2016

## COMPUTER PROGRAMMING

(Common to All)

- Note:
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 25 marks. Answer all Questions in part A.
  3. Part B consists of 5 units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

### PART-A

[25 Marks]

1. a) Define Identifier. Give examples. [2M]  
b) What are the advantages of Functions? [2M]  
c) What is meant by NULL character? Where do you used in C programming? [2M]  
d) What is the difference between structure and union? [2M]  
e) What are standard Input/ Output library functions available for files? [2M]
2. a) Draw a flow chart to find the largest number of given three numbers. [3M]  
b) Explain the usage of static storage class with example. [3M]  
c) Explain the pointer to pointer concept with simple example. [3M]  
d) Distinguish structures using array and arrays of structures [3M]  
e) What are the differences between text file and binary file? [3M]

### PART – B

[50Marks]

3. a) What are the standard data types available in C? Explain their size and range. [5M]  
b) Write a C program to calculate GCD of given two numbers. [5M]
- OR**
4. a) What are the control structures available in C? Explain with simple examples. [5M]  
b) Write a C program to find the reverse of a given number. [5M]
  5. a) Explain the array declaration and initialization with examples. [5M]  
b) Write a C program to find the multiplication of given two matrices. [5M]
- OR**
6. a) What are storage classes available in C? Explain each one with example. [5M]  
b) Write a C program to find the largest number in the given n numbers by using array concept. [5M]

7. a) Explain the pointer arithmetic with appropriate examples. [5M]  
b) Write a C program to find the standard deviation of given n numbers using pointers to function concept. [5M]

**OR**

8. a) Write about string manipulation functions available in C. [5M]  
b) Write a C program to check whether the given string is palindrome or not. [5M]
9. a) What are bit fields? What are its advantages? What is its syntax? [5M]  
b) Write a C program to store and print the information of vehicles. Use bit fields to store the status information. Assume the vehicle object consists of type, fuel and model member fields. Assume appropriate number of bits for each field. [5M]

**OR**

10. a) Define enumerated data. How do you declare and access enumerated data types? [5M]  
b) Write a C program to compute the monthly pay of 25 employees using each employee's name, basic-pay. The DA is computed as 52% of the basic pay and gross-salary = (Basic pay + DA). Print the employee's name and gross-salary. [5M]
11. a) How does an append mode differs from a write mode. [2M]  
b) Compare printf and fprintf functions. [3M]  
c) Write a program to copy upto 100 characters from a file to an output array. [5M]

**OR**

12. a) Explain the file opening modes. [5M]  
b) Write a C program to transfer all the contents of file1 to file2. [5M]

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