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Question Paper Code: ACS001



INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)

B.Tech II Semester End Examinations (Supplementary) - May, 2019

Regulation: IARE – R16

COMPUTER PROGRAMMING

(Common to AE | ME | CE)

Time: 3 Hours

Max Marks: 70

Answer ONE Question from each Unit

All Questions Carry Equal Marks

All parts of the question must be answered in one place only

UNIT – I

1. (a) Explain about bitwise operators in C. [7M]
(b) The distance between two cities in kilometers is input from the keyboard. Write an algorithm to display that distance in meters and centimeters. [7M]
2. (a) List various increment and decrement operators in C. [7M]
(b) Draw a flow chart to read a positive number and display message whether it is a even number or odd number. [7M]

UNIT – II

3. (a) Define Array. Explain different types of Arrays with example. [7M]
(b) Compare and Contrast while and do while loop? Write a C program to print the odd numbers from X to Y using do while loop? [7M]
4. (a) Define String and list any four string handling functions with examples. [7M]
(b) Write a C Program to input a matrix of size N X N and display it's transpose. [7M]

UNIT – III

5. (a) A function can pass any number of arguments and return values. Yes or No? Justify it. [7M]
(b) Define function prototype and comment which of following prototypes are valid/invalid. i) Int (f101) void; ii)double f101(void); iii) int f101(int a, b); iv) void fun(int a, int &b); [7M]
6. (a) Explain call by value & call by reference, actual arguments & formal arguments. [7M]
(b) Write a C program to find sum of given array elements using pointers. [7M]

UNIT – IV

7. (a) Define a structure and state how the members of a structure are accessed with example? [7M]
(b) Write a program to define a structure that store details of 10 railway passengers as name, PNR number, Source, Destination and class(SL/1A/2A/3A). Display details of sleeper class passengers. [7M]
8. (a) Explain in brief about dynamic memory allocation and functions used for it. [7M]
(b) Write a C program to maintain a book structure containing name, author and pages as structure members and display details of book. [7M]

UNIT – V

9. (a) Explain about file handling functions. Describe various modes of file opening. [7M]
(b) Write a C program that illustrates different file status functions. [7M]
10. (a) Write the syntax of the following file I/O functions and explain every option in each function with suitable example :
i. fopen()
ii. fclose()
iii. fread()
iv. fwrite() [7M]
- (b) Write a C Program to read a file “marks.dat” with rollno, name and marks in 3 subjects. Calculate total marks, percentage of marks and store details of students above 70 percent into a file ”Dist.dat”. [7M]

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