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# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Four Year B.Tech I & II Semester Supplementary Examinations - July, 2018

**Regulation: IARE – R16**

## COMPUTER PROGRAMMING

**Time: 3 Hours**

**(Common to All Branches)**

**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) The Process followed by a company to process customer orders is as follows: [7M]
- i. If the quantity ordered by the customer is less than or equal to that in stock and his credit is OK, then supply the requested order.
  - ii. If his credit is not OK, do not do any supply, send him an intimation.
  - iii. If the credit is OK, but quantity ordered by him is more than in stock, then supply what is in the stock.

Draw a flow chart to implement the above company policy.

- (b) Find the value of b, if  $b = \bar{a}$ , where  $a = 23$ , give it's description also. [7M]
2. (a) Explain bit-wise operators with example. [7M]
- (b) What are the value of a, b, c after execution of following code segment. [7M]

```
void main ()
{
int a=6, b=4, c=0;
c = (a- -, a*b++*10);
}
```

### UNIT – II

3. (a) Write a C program that reads a positive integer, then count and display number of even and odd digits in it. (Eg. 21967, Even Digits-2, Odd Digits-3). [7M]
- (b) Write a C program to read a line of text and display number of words and vowels in it. [7M]
4. (a) Briefly explain about various String Handling Functions in C. [7M]
- (b) Write a C Program to consider all the two digit numbers and display those numbers whose sum of their digits is 9 or 7. [7M]

### UNIT – III

5. (a) Explain the usage of pointers and the unary operators used. [7M]
- (b) Write a C Program to find sum of elements of a given array using pointers. [7M]

6. (a) What is function prototype? Write a program to illustrate function with parameters and return value. [7M]  
(b) Write a recursive function to display Fibonacci series of given N value using Recursion. [7M]

**UNIT – IV**

7. (a) What is structure and how it is differentiated from a union. [7M]  
(b) List various library functions used in dynamic memory allocation. [7M]
8. (a) Explain how a structure is passed through pointer to a function. [7M]  
(b) Write a C Program how to define nested structures and their initialization. [7M]

**UNIT – V**

9. (a) Write a C program to read two numbers from a file and display their sum. [7M]  
(b) Explain briefly about command line arguments. [7M]
10. (a) Explain about various file opening modes with example. [7M]  
(b) Write a C Program to copy a text file into another text file by skipping vowels. [7M]