INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)

MBA II Semester End Examinations (Supplementary) - May, 2019

Regulation: IARE–R16

C PROGRAMMING

Time: 3 Hours | **(MBA)** | **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 various primary data types available in C. **[7M]**

   (b) The cost of a mobile voice plan is Rs. 250 fixed with 100 calls per month and Rs. 1.25 is charged in excess of 100 calls. Write an algorithm to read number of calls made per month and print bill amount. **[7M]**

2. (a) Explain about usage of / and % operators in C with example. **[7M]**

   (b) A Mfg. company purchases a heavy machinery for Rs. 12,75,000/- and expects its life time to be 10 Years and at end it can be sold for Rs, 2,75,000/-. Draw a flow chart to calculate and display depreciation amount after the first year. **[7M]**

UNIT – II

3. (a) Differentiate between library functions and user defined functions. **[7M]**

   (b) Write a C program that reads sales amount for the product of a company in it's twelve months. Then calculate and display it's total sales amount using arrays. **[7M]**

4. (a) Explain about various storage classes in C with examples. **[7M]**

   (b) Write a recursive function to find factorial of a given number. **[7M]**

UNIT – III

5. (a) Define string. Write a C program to read and display name of city where you live in (Eg. New Delhi) **[7M]**

   (b) Expect output of b1 and b2: **[7M]**
   int b1,c=7,*p;
   p=&c;
   b1=3*(c-5);
   b2=(*p)+2;
   printf("%d %d",b1,b2);

6. (a) Explain about various string handling functions. **[7M]**

(b) Write a C program to reverse a string using strrev( ) function. **[7M]**

UNIT – IV

7. (a) Differentiate between structure and self referential structure. **[7M]**

(b) Write a program to define a structure, to store details of a 10 product as product number, name of the product and year of manufacture. **[7M]**

8. (a) Explain in brief about dynamic memory allocation and functions used for it. **[7M]**

(b) Write a program to define a structure for a book which contains book title, author, price and number of pages as members and read two book details and display the data. **[7M]**

UNIT – V

9. (a) Define file. Differentiate between text file and binary file. **[7M]**

(b) Describe various file opening modes with their syntax. **[7M]**

10. (a) Discuss about the following file handling functions **[7M]**
    i. fgets
    ii. gputs
    iii. putc
    iv. getc

(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]**