**Date:-22 Oct 2013**

**MGM’s College of Engineering, Nanded**

**First Year Engineering**

**Class:-FE-IV, V, VI Subject: -FCP**

**Assignment No:-3**

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1) WAP to create structure of 10 books with field’s book id, name & price. Display id name of book if price is more than 2000.

2) WAP to create structure of 50 employees with field’s id, name and salary and display their values.

3) WAP to create structure of account of 100 employees with fields having account no., id, name and balance. If balance is less than 1000 then display their account no., name and message “Minimum balance limit reached”.

4) Explain structure within structure with suitable example.

5) Explain/Write note on following file handling functions:

1.fopen () , 2.fclose() , 3.fgets() , 4.fputs() , 5.getc () , 6.fputc () , 7.fread() ,

8.fwrite() , 9.fprintf( ) , 10.fscanf () , 11.fseek( ) , 12.rewind () , 13.ftell() .

6) Write a note on dynamic memory allocation.

7) Explain different preprocessor directives in C.

8) Write a note on:

(a) Stack. (b) Queue. (c) Linked list.

9) What is computational complexity? Explain space and time complexity.

10) Differentiate between: (a) Structure and Union.

(b) Structure and array.

11) Hand-run the following programs.

a)#include<stdio.h>

main()

{

int j=5,j=10;

int \*x,\*y;

x=&i;

y=&j;

\*x=\*y+j;

\*y=\*x+i;

printf(“\n %d,%d”,i,j); }

b) #include<stdio.h>

#define AREA(x) 3.14 \*x \*x

void main()

{

int r1=1 , r2=2 , a;

a=AREA(r1);

printf(“\n Area of Circle 1 = %f”,a);

a=AREA(r2);

printf(“\n Area of Circle 2 = %f”,a );

}

c) #include<stdio.h>

#define LOOP for (i=1; i<=n; i++)

{sum += i ; }

void main()

{

int i, sum =0 , n=5;

LOOP;

printf(“%d”,sum);

}

Subject In-charge

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**Due date for Assignment Submission: - 11 Nov 2013**