

- Instructions :** (1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data, if necessary.

1. Attempt any **TEN** of the following : [20]

- (a) Enlist any four keyword used in C.
- (b) What is operator precedence and associativity?
- (c) Draw the flow-chart of switch statement.
- (d) Write syntax and use of
 - (i) strcmp()
 - (ii) strcpy()
- (e) Find the output of the following :

```
void main(){
    int i=1;
    clrscr();
    for(;;){
        printf("%d ",i);
    }
    getch();
}
```

- (f) What is a storage class? Enlist storage classes available in C.
- (g) State the advantage of function.
- (h) What is the use of (->) operator with pointers?
- (i) State four rules for choosing variable name.
- (j) Define the term (i) identifier (ii) token
- (k) State any two differences between while and do-while statement.
- (l) Find out the error if any, in the program.

```
#include<stdio.h>
int main(){
    int i=1;
    switch(i){
        case 1: printf("\radioactive cats have 18 half-lives");
        break;
        case 1*2+4: printf("\bottle for rent -inquire within");
        break;
    }
    return 0;
}
```

2. Attempt any **Four** of the following: [16]

- (a) Explain ? : operator with suitable example.
- (b) Explain any four bit wise operators used in C with example.
- (c) Enlist any four types of arithmetic operators used in C and give one example of each.
- (d) Distinguish between call-by-value and call-by-reference.
- (e) Write a program to print following pattern:


```
1 2 3 4
5 6 7
8 9
10
```
- (f) Explain with the example the use of Break statement.

3. Attempt any **Four** of the following: [16]
- Write a program to display whether entered number is positive integer or not.
 - Write a program to take input as a number and reverse it by using while loop.
 - Explain with example array of pointer.
 - Write a program to print fibonacci series.
 - What is the difference between pre-increment and post-increment operators? Explain with the help of an example.
 - Write a program to display all even numbers from 1 to N.
4. Attempt any **Four** of the following: [16]
- Explain the declaration and initialize of character array.
 - How the size of an array is calculated? Explain with suitable example.
 - Write a program for addition of two 3×3 matrix.
 - Write a syntax of switch case statement and write it's example.
 - Write a program to exchange value of two integer numbers using function.
 - Write a program to declare a structure stationary having data member, name quantity and cost. Accept and display this information for five items.
5. Attempt any **Four** of the following: [16]
- Explain strlen() and strcat() string handling function from standard library.
 - Write a program to sort array element in ascending order.
 - What will be output of following c code?


```
#include<stdio.h>
int main(){
    int i=1;
    for(i=0;i=-1;i=1){
        printf("%d ",i);
        if(i!=1) break;
    }
    return 0;
}
```
 - What is array of structure? List any two differences between array and array of structure.
 - State four storage class. Explain any one.
 - Write the meaning of declaration: int * ptr;.
6. Attempt any **Four** of the following: [16]
- Explain global and local variable with example.
 - Define pointer. How it declared and initialized?
 - Define :

(i) Function definition	(ii) Function body
(iii) Function call	(iv) Function Prototype
 - State any two advantages and disadvantages of pointer.
 - State four arithmetic operations perform on pointer with example.
 - Write a program to exchange values of two variables using pointer.

Paper Discussion Schedule for all Subject: FY Diploma Sem-II

Date	Day	Timing	Centre
9 April 2017	Sunday	9 a.m. to 11 a.m.	Dadar
9 April 2017	Sunday	12 p.m.to 2 p.m.	Thane
9 April 2017	Sunday	9 a.m. to 11 a.m.	Ghatkopar
9 April 2017	Sunday	12 p.m. to 2 p.m.	Borivali
9 April 2017	Sunday	12 p.m. to 2 p.m.	Nerul
9 April 2017	Sunday	3 pm to 5 pm	Kalyan

