

- 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 **FIVE** of the following : [10]

- (a) List any four relational operators.  
 (b) State uses of \* and & operators with respect to pointer.  
 (c) Write output of following Program:

```
# include <stdio.h>
void main()
{ int i;
  for(i = -1; i <= 10; i++)
  {
    if(i < 5)
      continue;
    else
      break;
    printf("Hello\n\n");
  }
}
```

- (d) Define array. How one dimensional array is declared?  
 (e) State any two types of function on the basis of parameter passing and return type.  
 (f) Define the term (i) identifier (ii) token  
 (g) State any two differences between while and do-while statement.

2. Attempt any **THREE** of the following: [12]

- (a) Explain ? : operator with suitable example.  
 (b) Explain any four bit wise operators used in C with example.  
 (c) Write a program to calculate factorial of number.  
 (d) Write a program to print following pattern:

```
1 2 3 4
5 6 7
8 9
10
```

3. Attempt any **THREE** of the following: [12]

- (a) Write a program to sort element of an array descending order.  
 (b) Write a program to take input as a number and reverse it by using while loop.  
 (c) Write a program to print fibonacci series.  
 (d) Write a program to find length of given string without library function.

4. Attempt any **THREE** of the following: [12]

- (a) Write difference between call by value and call by reference.  
 (b) Write a program for addition of two 3 × 3 matrix.  
 (c) Explain recursion with example.  
 (d) Distinguish between global and local variable.  
 (Note: Any other relevant point shall be considered.)  
 (e) 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 **TWO** of the following: [12]
- (a) Write a program in 'c' to copy one string into other without using built in function.
  - (b) What is array of structure? List any two differences between array and array of structure.
  - (c) State four storage class. Explain any one.
6. Attempt any **TWO** of the following: [12]
- (a) Write a program to show use of array of pointers.
  - (b) State any two advantages and disadvantages of pointer.
  - (c) State four arithmetic operations perform on pointer with example.



**Paper Discussion Schedule for all Subject: FY Diploma Sem.II**

Date	Day	Timing	Centre
8 April 2018	Sunday	9 a.m. to 11 a.m.	Dadar
8 April 2018	Sunday	9 a.m. to 11 a.m.	Thane
8 April 2018	Sunday	9 a.m. to 11 a.m.	Ghatkopar
8 April 2018	Sunday	9 a.m. to 11 a.m.	Borivali
8 April 2018	Sunday	9 a.m. to 11 a.m.	Nerul
8 April 2018	Sunday	3 p.m. to 5 p.m.	Kalyan