

Total No. of Printed Pages:4

**F. E. Semester-II (Revised Course 2007-2008)**  
**EXAMINATION MAY/JUNE 2019**  
**Information Technology**

[Duration : 3 Hours]

[Total Marks : 100]

**Instructions :**

Please check whether you have got the right question paper.

1. Attempt any five questions by selecting at least one questions from each module
2. Make suitable assumptions if required.

**Module- I**

- |     |  |    |
|-----|--|----|
| Q.1 | a) Describe the characteristics of monitor                 | 07 |
|     | b) What is Domain name and IP address?                     | 05 |
|     | c) Write short notes on                                    | 08 |
|     | i) Magnetic tapes  |    |
|     | ii) Floppy disk  |    |
| Q.2 | a) Describe the working of e-mail with a diagram.          | 10 |
|     | b) Explain different functions of Operating system.        | 04 |
|     | c) Explain the peer to peer and client server architecture | 06 |

**Module – II**

- |     |   |    |
|-----|---|----|
| Q.3 | a) Explain the generations of languages.                                  | 06 |
|     | b) Differentiate between low level and high level language.               | 06 |
|     | c) What is database? Explain any 4 database models.                       | 08 |
| Q.4 | a) State and explain the characteristics of data present in a database.   | 08 |
|     | b) What is flowchart? What are various notations used in flow chart?      | 04 |
|     | c) Provide an algorithm and flow chart to find sum of digits of a number. | 08 |



## Module –III

Q.5

- a) What do you mean by keywords in C? Explain their uses in a program. 05
- b) Write a program to check if alphabet entered is a vowel or a consonant using if-else. 06
- c) Write a C program to display sum of even and odd numbers between 1 to 500. 05
- d) Find the output of the following codes 04

<pre>#include&lt;stdio.h&gt;  int main() {      int a=500,b=500,c;      c=a/b;      c--;      printf("%d %d %d",a%b,c,a/b);      return 0;  }</pre>	<pre>#include&lt;stdio.h&gt;  int main() {      int x=5;      int y= x%(x-x/2)*(x-3)+x;      printf("%d",y);      return 0;  }</pre>
---	--

Q.6

- a) Differentiate between while and do while loop with an example. 04
- b) Write a C program to reverse a number. 04
- c) Write a C program using switch case construct to do the following 06
- When user enters 0: calculate the area of a circle
  - When user enters 1: calculate the perimeter of a circle



d) Find the output of the following codes

06

```
#include<stdio.h>
```

```
void main()
```

```
{
```

```
    int a=13,b=14;
```

```
    printf("%d\n",a&b);
```

```
    printf("%d\n",a|b);
```

```
    printf("%d",a^b);
```

```
}
```

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int i,j;
```

```
    for(i=1;i<=2;i++)
```

```
    {
```

```
        for(j=1;j<=2;j++)
```

```
        {
```

```
            if(i==j)
```

```
                continue;
```

```
                printf("%d
```

```
%d\n",i,j);
```

```
        }
```

```
    }
```

```
    return 0;
```

```
}
```

#### Module –IV

Q.7

- Describe the elements of a C function with the help of an example. What are the advantages of using functions?
- Explain with examples compile time and runtime initialization of 1D-Arrays
- Write a C program to add two matrices.

05

06

06



d) Find the output of the following

```
#include<stdio.h>
void xyz(int a)
{
    ++a;
}
void main()
{
    int a=500;
    xyz(a);
    xyz(a);
    printf("%d",a);
}
```

Q.8

- Explain different modes of a file.
- Write a C program to search element in a 1D array.
- Write a C program to transpose a matrix.
- Illustrate reading from and writing to a file using C program

05

05

05

05