

MSc Sem.-1 Examination

404

Bio-Informatics

February-2025

Time : 2-30 Hours]

[Max. Marks : 70

Q 1:

- a. Describe all the data types in C, their sizes. What are variables and how they are used in C [7]
- b. Write a program to input a char and print if its an alphabet or number or any other char [7]

Or

Q 1:

- a. Describe the operators in C using examples [7]
- b. Write a program to input a char and print whether it's a RNA character or not using switch case [7]

Q 2:

- a. Describe conditional constructs in C using examples [7]
- b. Write a program to input a number and print quart if its 4, half dozen if its 6, dozen if its 12, and score if its 20 (use switch case) [7]

Or

Q 2:

- a. Describe the looping constructs in C (while, for, do while) using examples [7]
- b. What is break and continue and how they are used with loops
Write a program to input numbers until -1 and print the sum of the numbers [7]

Q 3:

- a. Briefly explain what are arrays and its operations and describe the search operation using an example [7]
- b. Write a program to input 2 a string and print whether it's a palindrome [7]

Or

Q 3:

- a. Briefly explain strings in C. How they are declared and different ways to input a string.
Write a program to input a string and print all the vowels in the string [7]
- b. Write a program to input 10 nos in an array print the sum of numbers greater than 10 [7]

Q 4:

- a. Briefly explain how tables are created in HTML [7]
- b. Briefly explain CSS and how its used in an HTML page [7]

Or

Q 4:

- a. Briefly explain lists in HTML using examples [7]
- b. Briefly explain how hyperlinks are used in HTML using examples [7]

Q 5: Answer any 7 of the following : [14]

1. What is the size of float and double data type
2. What is the output of the given code:

```
#include <stdio.h>
void main() {
```

(P.T.O)

```

for (int i = 1; i <= 3; i++) {
    for (int j = 1; j <= 3; j++) {
        if (j == 2) {
            break;
        }
        printf("i = %d, j = %d\n", i, j);
    }
}

```

3. Write the ternary operator for the given code :
int a, b=7;

a should be assigned a 0 if b is greater than 5 else it should be assigned 1

4. Write the statement to create an integer array initialized with nos from 1 – 10

5. What is the output of the given code :

```
int a[10]={1,2,3,4,5,6,7,8,9,10};
```

```
for(int i=3;i<8;i++)
```

```
    printf("%3d, ", a[i]);
```

```
printf("%3d, ", a[i+1]);
```

6. Write the statements to print the length of the string using a for loop

7. Write the output of the given code :

```
int a=-1;
```

```
do
```

```
{
```

```
    scanf("%d",&a);
```

```
}while(a != -1);
```

8. Write the switch case to print weekdays if the user enters 1-5 and weekend if the user enters 6-7

9. Write the for loop to print a pattern as given below

```
1*
```

```
12*
```

```
123*
```

```
1234*
```

10. #include <stdio.h> is called the _____

11. Write the tag to create a hyperlink to file1.html such that the page opens in a new window

12. Write the image tag to display image1.jpg with a given width and height
