

What will be the result of the following character arithmetic expression?  
 $X = 'A' - 2$

- (a) 63 (b) 64 (c) 65 (d) 66

Which of the following header file is required for performing string operations

- (a) stdio.h (b) conio.h (c) string.h (d) ctype.h

Which function is used to count and return the number of characters in a given string

- (a) strlen() (b) strlen() (c) strrev() (d) strcat()

What will be the output of the program? void main()

```
{  
char str[] = "online!0exam!;printf("%s",str);  
}
```

- (a) online!0exam (b) online (c) onlineexam (d) exam

String concatenation means

- (a) Combining two strings (b) Extracting a substring out of a string  
(c) Comparing two strings (d) partitioning the string into two strings

Which function locates the first occurrence of the character in a given string

- (a) strstr() (b) strchr()  
(c) strchr() (d) strstr()

The library in python used for data visualization is

- (a) nlTK (c) pygame  
(b) Plotlib (d) Biopython

The expansion for IDE is

- (a) Integrated Development Environment  
(b) Integrated Developed Environment  
(c) Integral Development Environment  
(d) Integrated Developing Environment

Which have a special meaning in python

- (a) Identifiers (c) Keywords  
(b) Literals (d) Punctuators

Which of the following is not a valid identifier

- (a) GFG (c) \_GFG  
(b) gfg (d) 29cldf

Which of the following is a numeric literal in python?

- (a) o123 (c) 2 + 0i  
(b) 12o45 (d) 3o34

What is the output of the following code

```
main()
{char str1[ ]="mahendra singh",str2[ ]="dhoni captain";
strcat(str1,str2,5);
printf("-in %s",str1);
}
```

- (a) mahendra singh dhoni (b) mahendra singh dhoni captain  
(c) mahendra singh (d) None

The function `strcat(S2, S1)` appends \_\_\_\_\_ to \_\_\_\_\_

- (a) S1,S2 (b) S2,S1 (c) S2,S2 (d) S1,S1

Which of the following is used to read a string

- (a) `getchar()` (b) `gets()` (c) `getstr()` (d) `getch()`

Which of the following is the correct syntax for copying a string S1 into S2?

- (a) `strcpy(S2,S1);` (b) `strcpy(S1,S2);`  
(c) `strcmp(S1,S2);` (d) `strcmp(S2,S1);`

Which one of the following is a string constant

- (a) `_3*` (b) `"hello"` (c) 30 (d) 1-

Which of the following not belongs to String functions?

- A. `strcmp()` B. `strcat()` C. `strlen()` D. `isdigit()`

Which have a special meaning in python

- a. Identifiers c. Keywords  
b. Literals d. Punctuators

What will be the output of the below python program?

```
a=20
b=(a==20)
print(b)
```

- a. True c. 1  
b. 20 d. False

Which of the following is a special literal

- a. string c. int  
b. float d. decimal

The operator `//` is used in python for

- a. division c. Floor division  
b. comment d. modulus

The operator that used to compare the objects is

- a. Binary operator c. Unary operator  
b. membership operator d. Identity operator



8 MARKS

Write a C program to implement `strcmp()`, `strcat()`, `strcpy()` and `strlen()`.

Write a C program to count the number of vowels, consonants, digits, spaces and special characters in a given string.

Using a python program, analyse the different logic behind swapping the values between variables

Explain the looping statements (while and for loops) with an example

Write a python program to find the given number is positive, negative or zero using Nested if conditional control structure.

What is function? How a function is defined and called in python? Explain with a simple program.

Write a program to replace each constant in a string with the text one except letter 'z', 'Z' and 'a', 'A'. Thus the string "Programming in C is fun" should be modified as "Qsphsarrnjoh jo D jt gvo".

Create a function to perform the simple interest using function with argument and return type and function with argument and no return type.

List the different types of conditional control statements in python and explain them with suitable example

Write a python program to implement student mark system using chained conditional if control structure.

Write a function reads two numbers and evaluates whether they are co-prime or not. Two numbers are said to be co-prime if they do not have any common divisor other than one.

Write a python code to print all numbers in a range (a,b) divisible by a given number (n)

15 MARKS

Write a C Program to implement string copy operation `STRCOPY(str1, str2)` that copies string str1 to another string str2 without using library function.

Define string. List out all string manipulation function. Explain any two with example. Explain any four string manipulation functions with examples.

Define a recursion. Write a C recursive function for multiplying two integers where a function call is passed with two integers m and n

Write a C program to illustrate call-by-value parameter passing technique and Write a C program to explain call-by-reference parameter passing technique.