K26FY1216 Pages: 2 Reg No:.....
Name:.....

Second Semester FYUGP Degree (Reg/Sup/Imp) Examination April 2026

KU2DSCCAP106 - PROGRAMMING USING C AND C++

2024 Admission onwards

Time : 1.5 hours Maximum Marks : 50

Section A

Answer any 6 questions. Each carry 2 marks.

1. How will you declare an array in C?
2. How does strlen() work in C?
3. Can a base class pointer point to a derived class object?
4. Can we create an object of an abstract class? Why or why not?
5. Write a short note on extraction or getfrom operator in C++.
6. How dynamic allocation is achieved in C++ programming?.
7. Differentiate between address operator(&) and indirection(*) operator.
8. Explain the use of fprintf() and fscanf() functions in C.

Section B

Answer any 4 questions. Each carry 6 marks.

9. Write a C++ program to implement a member function outside the class.
10. Describe the major parts of a C++ program with an example.
11. Write the syntax of a destructor? How it is different from constructor?
12. Illustrate pointers in using the example given.
    Justify the output.

```
# include <stdio.h>;
void fun(int *ptr)
{
*ptr = 30;
}

int main()
{
int y = 20;
```

```
fun(&amp;y);
printf("%d\n", y);
return 0;
}
```

13. Explain the steps to open and close a file in C and mention input output operations on file.

14. How do you read from a file in C using file functions, illustrate with examples.

Section C

Answer any 1 questions. Each carry 14 marks.

15. Write a program to copy even elements in an ID array to another array

16. Write necessary member functions to read and disCreate a base class Patient (pat-name, age, sex) and IPD (ward-no, bed-no, chrge-per-day).

    Derive a class IPD-patient from these two base classes with no-of-days-admitted attribute. Write a program to accept and display details of 39 patients. print the details of 'n' customers.