



PURBANCHAL UNIVERSITY

2026

B. E. (Computer/EC&A/Electrical/Biomedical)/First Semester/Final
Time: 03:00 hrs.

Full Marks: 60/Pass Marks: 24

BCE1001: Computer Programming (New Course)

Candidates are required to give their answers in their own words as far as practicable.

All questions carry equal marks. The marks allotted for each sub-question is specified along its side.

Attempt ALL questions

Group A

Very short questions:

4x2=8

1. Define debugging and testing.
2. Write output for given program:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a=2430;
printf("%d", ++a);
printf("%d", a--);
printf("%+4d", a);
printf("%06d", a);
getch();
}
```

3. List the types of operator available in C(name-only).
4. Write a program to draw circle with center at (200,300) and radius 50.

Group B

Short questions:

7x4=28

5. Write an algorithm and design flowchart to find out the factorial of a number.
6. Write a program to read some text and continue reading process until user enter a character 'a' or 'k' as input. Finally display entered text except termination character.

Contd. ...

(2)

7. Explain any two string handling functions with example.
8. Write a program to find whether the entered number is palindrome or not.
9. Define array. Write syntax to declare an array. Write a program to input five number and store in one dimensional array.
10. Write a program to display the pattern as:

```
P
PU
PUR
PURB
PURBA
PURBAU
PURBAUN
PURBAUNC
PURBAUNCH
PURBAUNCHA
PURBAUNCHAL
```

11. Compare function call by value and function call by reference.

OR,

Illustrate the concept of recursive with example.

Group C

Long questions.

3×8=24

12. Discuss about 2-dimentional array with example. Write a program using pointer to read a 3*3 matrix. Then display the resultant matrix by multiplying each of elements with 3. 3+5
13. Differentiate between text file and binary file. Write a program to open a file named "student.txt" in write mode and store name, age and run made by five player. Read the information from the file and display the name of those player who made the run greater than 100. 2+6
14. Compare structure and union. Create structure named Student, which has name, 3+5 address, contact and marks as member.

Contd. ...

(3)

Write a program to read name, address, contact and marks of 6 students and display details of students whose marks is greater than 75. 3+5

15. Differentiate between local and global variable. Explain structure of C program in detail. 3+5

