

**Punjab Technical University**  
**BBA Examination 2007-2008**

**BBA Semester 5<sup>th</sup> PROGRAMMING IN C & C++ 2007**

**Time : 03 Hours Maximum Marks : 75**

**Instruction to Candidates:**

- 1) Section - A is Compulsory.**
- 2) Attempt any Nine questions from Section - B.**

**Section – A (15 × 2 = 30)**

- a) What is structured and unstructured programming?
- b) What is the purpose of break and continue statements?
- c) What is object-oriented programming?
- d) Explain various logical operators in C/C++. Write them in order of their precedence.
- e) Explain the syntax and purpose of strcat( ) and strcpy( ) functions.
- f) What is the difference between = and == operators?
- g) Explain the difference between ++a and a++.
- h) What is recursion?
- i) What do you think is the reason of an error message “Misplaced else”?
- j) What is the difference between array and structures?
- k) List some of the illegal operations on pointers?
- l) Explain the terms “default constructor” and “default argument constructor”.
- m) Explain the term “nesting of if-else”.
- n) List any two advantages of cout and cin over printf and scanf.
- o) What is the size of one single float type of variable?

**Section – B (9 × 5 = 45)**

- Q2) What do you understand by the term “object-oriented programming”?  
Explain the terms: Encapsulation, inheritance, abstraction, polymorphism?
- Q3) Write a program to find out the factorial of a number using recursion.
- Q4) Write a program to test whether the number entered from keyboard is prime number or not.
- Q5) Give and explain the syntax of while-loop, do-while loop and for loop.  
What is the difference between while loop and do-while loop?
- Q6) Write a program to add two matrices in C/C++.
- Q7) Evaluate the following expressions:
- (a)  $2 + 3 * 5 \% 9 - 6$
  - (b)  $4 * 5 - 6 * 3 \% 2$
  - (c)  $6 >= 6 \&\&! (15 < 2)$
  - (d)  $!(15 >= 2) ! (200)$
  - (e)  $4 + 5/2 - 3 + 6* 7 \% 8$
- Q8) Write a program to find the sum of first n natural numbers.
- Q9) Write a program to calculate the area and perimeter of rectangle taking care that negative and zero values for length and width of rectangle are rejected by the computer.
- Q10) Explain the syntax of if-else statement. Explain the term “nesting of if-else”.

Q11) What are pointers? Explain “call-by value” and “call by reference” with examples.

Q12) Write short note on following statements:

(a) return (b) switch (c) break (d) continue

Q13) Write a program to find out the sum of n numbers inside the one-dimensional integer array.