### 2006 PUNJAB TECHNICAL UNIVERSITY M.C.A

## PROGRAMMING IN C MCA-102, Ist Semester (2096)

Time: 3 Hours Max Marks;75

# Note: 1. Part A is compulsory. Answer the questions in 40-60 words.

### 2. Attempt any nine questions from Part B

#### Part A

- i. What are the operators and operands?
- ii. What do you mean by iteration?
- iii. What are multidimensional arrays?
- iv. What are the disadvantages of recursion?
- v. What are header files?
- vi. What are user defined data types?
- vii. Write syntax for union.
- viii. What do you mean by enumeration?
- ix. How can we pass parameters to a function?
- x. What are data input and output statements?
- xi. What is sequential organization?
- xii. What are static variables?
- xiii. What is the disadvantages of using goto statement?
- xiv. What are different storage classes?
- xv. What is the difference between else if and switch statement?

# Marks:15X2=30

- 1. What is the purpose of drawing flowchart? What are the various symbols used in the flowchart? Draw a flowchart to check whether number is even or odd.
- 2. Explain assignment and conditional statements with example.
- 3. What are the various operations that can be performed on arrays? How can we read and display one-dimensional array?
- 4. Write a program in C to convert a decimal number into binary, octal and hexadecimal numbers.

- 5. What is the difference between getchar().getch() and getche()?
- 6. Explain various strings functions.
- 7. How can we copy and concatenate a string?
- 8. Explain different storage class specifiers in C.
- 9. Explain dynamic memory allocation.
- 10. Write a program in C to sort the list of numbers using selection sort method.
- 11. What are the different functions for opening and closing a data file.
- 12. What type of operations can be performed on pointers? How can we pass simple *variable by pointers?*

*Marks:* 9X5=45

