# 2006 PUNJAB TECHNICAL UNIVERSITY M.C.A 

PROGRAMMING IN C<br>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?
$x v$. What is the difference between else if and switch statement?

Marks: $15 \times 2=30$

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: $9 X 5=45$

