First Semester MCA Degree Examination, June/July 2016

Problem Solving Using C

Time: 3 hrs. Note: Answer any FIVE full questions.

Max. Marks:100

	11/1	Paramony 1	
1	a.	Draw the flow chart to find all the roots of Quadratic equation.	(06 Marks)
	b.	State the differences between Implicit and Explicit type conversions.	(04 Marks)
	c.	Explain the various types of storage classes.	(10 Marks)
2	a.	Describe in detail the different types of operators available in 'C'.	(12 Marks)
	b.	Write a 'C' program to find the sum of even and odd 'n' numbers.	(08 Marks)
3	a.	Elucidate formatted and unformatted Input/output statements with examples.	(12 Marks)
	b.	What are control structures? Write the syntax for the representation of while, f	
		looping statements.	(08 Marks)
4	a.	Write a 'C' program to find the multiplication of two matrices.	(10 Marks)
	b.	Discuss indetail the various string handling functions.	(10 Marks)
5	a.	Explain the following	
		i) Call by value	/00 M L.A
	,	ii) Call by reference	(08 Marks) (12 Marks)
	b.	Describe the various categories of functions with an example.	(12 Marks)
6	a.	Write a 'C' program to find the largest of two numbers by employing function returning the	
		pointers.	(10 Marks)
	b.	Discuss the procedure of passing string to a function with an example.	(10 Marks)

- 7 a. What are structures? Explain the procedure to access the arrays of structures.

 (06 Marks)

 Mention the differences between structures and functions.

 (04 Marks)
 - b. Mention the differences between structures and functions.
 c. Write a program to demonstrate structure within structure.
 (04 Marks)
 (10 Marks)
- **8** Write a short note on:
 - a. Preprocessors
 - b. I/O file handling functions
 - c. Command line arguments
 - d. Dynamic memory allocation

(20 Marks)