LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034 **B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE** FIRST SEMESTER – APRIL 2010 CS 1503/CA 1503 - PROGRAMMING IN C Max.: 100 Marks Date & Time: 30/04/2010 / 9:00 - 12:00 Dept. No. **PART-A** (10x2=20)**Answer ALL questions** 1. What is an algorithm? 2. Give example of bitwise operators. 3. What is an array and its types? 4. What is the structure of while loop? 5. Define: Functions 6. What is a multi file program? 7. Differentiate structure and union. 8. What is pointer? Give example 9. What are the types of file streams? 10. What is predefined macro? PART-B **Answer ALL questions** (5x8=40)11. a. i) Explain in detail about variables and data types with example. (4Marks) ii) Explain library functions in C programming? (4Marks) (**or**) b. Write an algorithm to find the biggest of three numbers. 12. a. Explain switch statements with example program. (**or**) b. Explain various IF statement with examples. 13. a. What is function? Write a C program using call by value? (or) b. Explain various strings functions with an example. 14. a. Write a program to swap the values using the pointers. (**or**) b. Write a C program to read the bio-data of n number of employees using array of structures. 15. a. Explain various File operations in C programming. (**or**) b. Explain about the compiler control directives with an example. PART-C Answer any TWO questions (2x20=40)16. a) Discuss in detail about steps involved in computer programming. b) Explain about the operators and expression in C. 17. a) Discuss about the decision making and looping statement in detail. b) Write C program to do the matrix multiplication using functions. 18. (a)Write a C program to sort an array of strings using pointers. (b)Explain about the dynamic memory allocation in detail.

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