Code No: 132AD JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech I Year II Semester Examinations, August/September - 2017 COMPUTER PROGRAMMING IN C (Common to EEE, ECE, CSE, EIE, IT) Time: 3 hours Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions. (25 Marks) 1.a) Give the decimal equivalent of $7AC_{(16)}$. [2] What is ternary operator in C? Give example expression for its use. b) [3] c) List the advantages of functions. [2] How to declare and initialize a multi dimensional array? d) [3] e) What is the purpose of pointers? [2] List the input/output functions/for strings. f) [3] What are the different type castings supported in Ca g) [2] Give an example for nested structure. h) [3] i) Contrast fread and fscanf functions. [2] i) What is meant by opening a data file? How is this accomplished? [3] (50 Marks) 2.a) Why is C language known as middle-level language? b) Draw a flow chart to find average of 10 numbers. [5+5] What is associativity? Illustrate its application in expression evaluation. 3.a) Which statement is a multi way selection statement? Why? b) What is the difference between actual and formal parameters? With illustrative examples

explain parameter passing techniques. [10]

[5+5]

5.a) Write a recursive function to print Fibonacci sequence.

b) Discuss the applications of arrays.

6.a)/How to declare a pointer to a function? What is its use?

b) What is the difference between calloc and malloc functions?

7.a) Write a program to display the location of a character 'T' in a given string.

b) Give the signatures of getch, puts functions. [5+5]

Differentiate between structure and union? Give an example usage. 8.a) What is the benefit of bitfield usage? [5+5]OR Write a program using structures to search a name in a record of ten mobile subscribers and print the name address, bill number and amount of the searched record. Write a program to copy contents of one file to another using file names passed as the 10. [10] command line arguments. 11.a) What are the modes in which files can be opened? b) Write a program to store students information (id, name, address, marks) into a file and print the information from the file. ---ooOoo---G AG AG $A(\hat{a})$ AG AG A

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