Tribhuvan University Institute of Science and Technology 20/5

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0 Full Marks: 60 Bachelor Level / First Year/ First Semester/ Science Pass Marks: 24 Computer Science and Information Technology (CSc. 110) Time: 3 hours. (C Programming) (NEW COURSE) Candidates are required to give their answers in their own words as for as practicable. The figures in the margin indicate full marks. $(2 \times 10 = 20)$ Attempt any two questions: What is looping statement? Discuss different looping statements with suitable example of each. Define array? What are the benefits of using array? Write a program to add two matrices using 3. Why do we need data files? What are the different file opening modes? Write a program that reads data from a file "input.txt" and writes to "output.txt" file. $(8 \times 5 = 40)$ Attempt any eight questions: (5) Discuss different logical operators in detail. What is break statement? Discuss with example. How the break statement is different from continue statement? (5) Write a program to check whether a number entered is even or odd. (5) 7. Write a program to calculate sum of first 10 odd numbers. 8. What is preprocessor directive? Discuss # define directive with example. (1.5+3.5)(5) Discuss any five string library functions. 10. What is dynamic memory allocation? Discuss the use of malloc () in dynamic memory allocation with example. 11. What is structure? Create a structure rectangle with data members length and breadth. (2+3)(2.5+2.5)

15, 50

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12. Write short notes on:

(a) Benefits of data files (b) Graphics functions.