Tribhuvan University

Institute of Science and Technology

2081

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Bachelor Level / First Year/ First Semester/ Science Full Marks: 60 Computer Science and Information Technology (CSC110) Pass Marks: 24 (C Programming) Time: 3 hours. (OLD COURSE) Candidates are required to give their answers in their own words as for as practicable. The figures in the margin indicate full marks. Section A Attempt any TWO questions. $(2 \times 10 = 20)$ 1. Explain different forms of if statements with example of each. Write a program to check wheather a number entered is divisible by both 5 and 7. (6+4)2. Define array. Why do ee need array? Write a program to multiply two matrices. (1+2+7) 3. What is structure? How is it differet from array? Create a structure named student with name, address, and age as its members. Write a program using this structure to read data of 10 students and display data of those students who live in "Kathmandu". Section B Attempt any EIGHT questions. $(8 \times 5 = 40)$ 4. Explain algorithm with example. What are the benefits of using algorithms? 5. What is identifier? Explain rules for valid identifiers with example. What is keyword? (1+3+1)6. What do you mean by formatted I/O? Explain. (5)7. Write a program to find sum of first n odd numbers. (5)8. Write a program to find sum of two integers using your own function. (5)9. Define Pointer. Write a program to illustrate passing pointers to function. (1+4)10. Explain different file opening modes. (5)11. Write a program to draw an ellipse using graphics function. (5)

 $(2 \times 2.5 = 5)$

12. Write short notes on:

a) Problem analysis

b) Increment and decrement operator