

Tribhuvan University
Institute of Science and Technology
2077

Bachelor Level / first-semester / Science Full marks: 60 **Computer Science and Information Technology(CSC110)** Pass marks: 24 (C Programming) Time: 3 hours Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Section A

Attempt any two questions:[2x10=20]

1. What do you mean by looping? Explain the while loop with suitable examples. Compare while loop with do while loop. Write a program to find sum and average of first n natural numbers.[1+3+2+4]
2. What are the benefits of using arrays? Compare one dimensional array with two dimensional array. Write a program to find transpose of a matrix.[2+2+6]
3. What is structure? How is it different from union? Create a structure named course with name,code and credit_hour as its member. Write a program using this structure using this structure to read data of 5 courses and display data of those courses with credit_hour greater than 3.[1+2+7]

Section B

Attempt any eight questions:[8x5=40]

4. Explain flowchart with examples. What are the benefits of using flowchart?[3+2]
5. What is the data type? Why do we need it in programming? Explain any three basic data types with example.(1+1+3)
6. What do you mean by unformatted I/O? Explain.[5]
7. Write a program to display first in prime numbers.[5]
8. Write a program to find product of two integers using your own function.[5]
9. Define pointer. How do you return pointers from functions? Explain with example.[1+4]
10. Explain different file I/O functions with example.[5]
11. Write a program to draw a circle using graphics function.[5]
12. Write short notes on:[2x2.5=5]
 - a. Compilation and execution
 - b. Operator precedence and associativity