

Tribhuvan University  
**Institute of Science and Technology**  
2073  
☆

Bachelor Level / Second Year/ Third Semester/ Science  
**Computer Science and Information Technology (CSc. 202)**  
(Object Oriented Programming)

Full Marks: 60  
Pass Marks: 24  
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:**

(2×10=20)

- ✓ 1. What is object-oriented approach? How is it different from structured programming approach? Discuss the features of object-oriented languages in detail. (2+2+6)
2. How can we use inheritance for code reusability? Discuss multiple inheritance with suitable example. (3+7)
- ✓ 3. What is function overloading? How is it different from function overriding? Write a program that gives an example of function overriding. (3+3+4)

**Section B**

**Attempt any eight questions:**

(8×5=40)

- ✓ 4. Explain abstraction with example.
- ✓ 5. Discuss input and output with C in and C out respectively.
6. Discuss relationship between pointers and arrays.
- ✓ 7. Explain the use of inline function with example.
- ✓ 8. What is class? Differentiate it with object.
- ✓ 9. How can you define a member function outside a class? Explain with suitable example.
- ✓ 10. Write a program that increases an integer value by 1 (one) overloading ++ operator.
- ✓ 11. Discuss importance of template. Write syntax of function template.
- ✓ 12. Discuss different keywords used in exception handling.