

**Tribhuvan University**  
**Institute of Science and Technology**  
2069  
☆

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:** (2x10=20)

1. Differentiate between structural programming approach and object oriented programming approach. Explain the inheritance, polymorphism with example.
2. How is a member function of a class defined? Define friend function. What are the merits and demerits of using friend function? Explain.
3. Define constructor, list some of the special properties of the constructor functions

**Section B**

**Attempt any eight questions:** (8x5 = 40)

4. Explain the do while structure.
5. Explain the inline function with example.
6. How is dynamic initialization of objects achieved?
7. What are the importance of destructors?
8. What is an operator function? Explain with syntax.
9. Explain with example, how you create space for array of object using pointers?
10. Explain the features of I/O system supported by C++.
11. Differentiate between overloaded functions and function templates.
12. What are the main advantages of using exception handling mechanism in a program?
13. What are the major differences between overriding and overloading?