

TRIBHUVAN UNIVERSITY  
FACULTY OF MANAGEMENT

Office of the Dean

January 2021

Full Marks: 60

Pass Marks: 27

Time: 1.5 hrs.

**BIM / Seventh Semester / IT 227: Object Oriented Analysis and Design**

*Candidates are required to answer the questions in their own words as far as practicable.*

*Attempt any Six Questions:*

*[6 × 10 = 60]*

1. What is GRASP? Describe any three GRASP principles or patterns.
2. What is iterative & incremental development process? What are the benefits of iterative & incremental software development process?
3. What do you mean by Model View Controller (MVC)? Explain with example.
4. Draw a sequence diagram for issuing and renewing a book in online library management system.
5. What is the importance of use case diagram? Explain extends and includes relationship between use cases with suitable example.
6. What is class diagram? Draw a class diagram for given statement: customers have account in bank. Bank has name, address, estd\_date; Customer has Name, address, gender and Account has account\_no, type as attributes. Make required assumptions about association between those objects.
7. Explain Observer Design Pattern and Adapter Design Pattern.
8. Why reusability is important? Justify with example.

