

**NEPAL COLLEGE OF INFORMATION TECHNOLOGY**  
**SEF FIRST ASSIGNMENT**

Level: Bachelor                      Semester – Spring                      Year : 2020  
Programme: BEIT(4<sup>th</sup> semester)                      Time : 2 weeks  
Course: Software Engineering Fundamentals

*Students are required to give their answers in their own words as far as practicable.*

1. a) Explain Spiral Model of Software development with a neat diagram.  
b) What is evolutionary software process model? Explain. Also show that as you move outward along the process flow path of an evolutionary model. What can you say about the software that is being developed or maintained?  
c) What is software process model? Explain incremental model with diagram
2. a) What are the characteristics of software? Explain software crisis. What are the reasons of software crisis?  
b) Can evolutionary model be satisfactorily used for the development of all types of project? Describe the prototyping model.
3. a) Explain the terms people, product and project. What do you mean by generic framework activities and umbrella activity in software process?  
b) Explain component based development process highlighting its advantages over conventional approach.
4. Write short notes on :
  - a) Formal method
  - b) Fourth Generation Techniques
  - c) Process Technology