

**Class:** III-I B.Tech

**Subject:** software engineering

**Name of the Faculty:** Ch.Srinivasulu

**Unit:** 1

**ASSIGNMENT -1**

- 1.** Explain the following:
  - (a) Importance of Software
  - (b) Software myths
  
- 2.** Give a Generic View of Software Engineering.
  
- 3.** (a) List the Application of Software engineering.  
(b) Explain about Capability Maturity Model Integration (CMMI).
  
- 4.** Explain how water-fall model is applicable for the development of the following systems.
  - a) A University Accounting System.
  - b) An interactive system that allows railway passengers to find time and other information from the terminals installed in the stations.
  
- 5.** Discuss the statement, "PSP and TSP are rigorous approaches to software engineering that provides distinct and quantifiable benefits in productivity and quality"
  
- 6.** (A) Write few reasons for the software failures?

(B) Give some points on how to overcome software failures with examples.

## DEPARTMENT OF INFORMATION TECHNOLOGY

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**UNIT: 2**

### ASSIGNMENT –2

1. What is software process assessment? Describe its purpose. Explain why SPICE has been developed as a standard for Software process assessment?
2. Discuss any four process models along with their advantages and disadvantages?
3. (a) Define the metrics for specifying the non functional requirements  
(b) Give the reasons why quantitative requirements' specification is difficult in practice  
(c) Distinguish between functional and non functional requirements.
4. What are Domain Requirements? Explain the domain requirement for the library system.
5. Explain about SRS. What are the central problems in Software Requirement specifications? Is it possible to have a system that can automatically verify completeness of an SRS document? If not, why?

6. (a) What are the different outputs produced during the development of a software.  
(b) Give the outline of prototyping model of software with advantages.
7. Explain the WINWIN SPIRAL MODEL. Suggest an application where it can be used.

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**UNIT:** 3

#### ASSIGNMENT -3

1. (a) List out the persons and entities involved in a requirement review.  
(b) Draw a process model how a requirements review will be organized.
2. (a) What is feasibility Study? Describe the feasibility Study process.  
(b) Write a short note on feasibility report.
3. (a) Discuss in detail the data modeling activity.  
(b) Write briefly about the utility of state transition diagram in analysis modeling activity
4. Explain viewpoint- oriented techniques to requirement discovery for library system along with various types of viewpoint.
5. Explain the following briefly:

(a) Alternative Analysis techniques

(b) Requirement Analysis techniques

6. Discuss in detail about Formal Technical Reviews (FTR) performed by software engineers.