

B. Sc. (IT) Part II Semester -IV
Paper I
Software Engineering

Unit I

Introduction to Software Engineering : The evolving role of software, Changing Nature of Software, Software myths. A Generic view of process : Software engineering- A layered technology, a process framework, The Capability Maturity Model Integration (CMMI), Process patterns, process assessment, personal and team process models.

Unit II

Process models : The waterfall model, Incremental process models, Evolutionary process models, The Unified process. Software Requirements : Functional and non-functional requirements, User requirements, System requirements, Interface specification, the software requirements document.

Unit III

Requirements engineering process : Feasibility studies, Requirements elicitation and analysis, Requirements validation, Requirements management. System models : Context Models, Behavioral models, Data models, Object models, structured methods.

Unit IV

Design Engineering : Design process and Design quality, Design concepts, the design model.