

Project Management

B.Sc. (IT) Sem. VI

(Elective – I)**EVALUATION SYSTEM**

	Time	Marks
Theory Exam	3 Hrs.	100
TW / Tutorial	–	50

SYLLABUS

- 1. Conventional Software Management :** The waterfall model, conventional software management performance.

Evolution of Software Economics : Software Economics, pragmatic software cost estimation.

Improving Software Economics : Reducing Software product size, improving software processes, improving team effectiveness, improving automation, Achieving required quality, peer inspections.

- 2. The old way and the new :** The principles of conventional software Engineering, principles of modern software management, transitioning to an iterative process.

Life cycle phases : Engineering and production stages, inception, Elaboration, construction, transition phases.

Artifacts of the process : The artifact sets, Management artifacts, Engineering artifacts, programmatic artifacts.

Model based software architectures : A Management perspective and technical perspective.

- 3. Work Flows of the process :** Software process workflows, Iteration workflows.

Checkpoints of the process : Major mile stones, Minor Milestones, Periodic status assessments.

Iterative Process Planning : Work breakdown structures, planning guidelines, cost and schedule estimating, Iteration planning process, Pragmatic planning.

- 4. Project Organizations and Responsibilities :** Line-of-Business Organizations, Project Organizations, evolution of Organizations.

Process Automation : Automation Building blocks, The Project Environment.

- 5. Project Control and Process Instrumentation :**The seven core Metrics, Management indicators, quality indicators, life cycle expectations, pragmatic Software Metrics, Metrics automation.

Tailoring the Process : Process discriminants.

- 6. Future Software Project Management :** Modern Project Profiles, Next generation Software economics, modern process transitions.

Reference :

- Software Project Management, (*Walker Royce*), Pearson Education, 2005.