

# **Sardar Patel College of Engineering**

**Managed by: Tirupati Foundation Trust**

**Department of Information Technology**

**Assignment**

**SOFTWARE PROJECT MANAGEMENT**

**(3171609)**

## **UNIT NO: 01**

1. What is project? Explain Project management life cycle **OR** Discuss the Structure, advantage and limitation of SLIM (Software Lifecycle Management). **OR** Describe major phases of project management life cycle. **OR** What is Project? Explain Software Project Management Life Cycle? **OR** Discuss the contents of a Software Project Management Plan.
2. Explain the major activities carried out by Software Project Management? **OR** What is software project management? What are the categories of software projects? **OR** Explain major activities carried out by a software manager. **OR** Explain the major activities carried by Software Project Manager and the order in which they are carried out.
3. What is contract? Explain Types of Contract in brief **OR** what is Contract? Explain Types of Contract in SPM. **OR** Explain different types of contracts and explain different stages in contract placement. **OR** List out the various stages in contract placement and explain each in brief.
4. What is Different between methods and Methodologies?
5. What are the characteristic that make software project different from other project

## **UNIT NO: 02**

1. What is Process Model? Explain how to choose process model in SPM **OR** What is Process Model? Explain How to Choose the Process Model for SPM? **OR** Explain process capability models techniques in brief. **OR** What are the Three Classes of Portfolio models?
2. Describe how cost benefit evaluation techniques can be used to choose the best among competing project proposal **OR** Discuss the various cost benefit evaluation techniques in brief. **OR** With neat sketch, explain the steps of software effort and cost estimation.

- OR** Explain Cost-benefit Evaluation Techniques helps in SPM. **OR** What is Cost Estimation? Explain Capers Jones Estimating Rules.
3. Discuss the role of cost estimation in software development project. Briefly explain COCOMO model for cost estimation for all categories of project. **OR** Discuss the role of cost estimation in software development project. Briefly explain COCOMO model for cost estimation. **OR** What is Estimation? Explain COCOMO model of Estimation **OR** Briefly explain the three levels of COCOMO model. **OR** Explain COCOMO-II model in detail.
  4. Where Estimation Done? Differentiate top down & Bottom up Estimation **OR** What is Estimation? Differentiate Bottom-up Estimation v/s Top-down Estimation. **OR** Explain in brief the Top-down and Bottom-up estimation techniques **OR** Explain the top down and bottom up work break down structure with the help of a suitable diagram.
  5. Where Estimation done? Explain Different of Over Estimation v/s Under Estimation. **OR** Compare over and Under estimation
  6. Explain Waterfall Model and Software Prototyping Model works in SPM. **OR** Explain waterfall and spiral model and various activities in each phase.
  7. What is agile modeling? Explain Extreme programming (XP) in brief **OR** State the disadvantages of waterfall model and also state how these disadvantages are overcome by agile model.
  8. What do you understand by Incremental Delivery approach, also Explain advantages and disadvantages of using this approach
  9. State the characteristics of the “V shape SDLC model”.
  10. Explain Spiral Model in brief

### UNIT NO: 03

1. What is scheduling? Compare it with sequencing
2. Write about critical chain scheduling. **OR** Explain with an example how critical path can be identified in the precedence network? **OR** Explain How Activity Planning done? Explain How to Identifying Critical Activities? **OR** Calculate the earliest start and completion dates of the activity using the forward pass of the Critical path method for the following project details and draw the activity network at the completion of the forward pass. Clearly indicate the steps followed in the calculation.
3. Explain PERT & CPM techniques in brief **OR** Illustrate the PERT method of identifying the critical path of a project. **OR** Describe with an example how the effect of risk on project schedule is evaluated using PERT.

4. What are the various techniques used for visualizing progress in software management, explain any two techniques with a neat diagram. **OR** Explain the following: [a] Grantt chart [b] RAG reporting
5. Describe the smoothing technique of Scheduling Resources, Explain using a histogram.

### **UNIT NO: 04, 05, 06, 07, 08**

1. What is Risk? List Category of Risk and how evaluate risk **OR** What is Risk? List Categories of Risk and Explain How to Evaluating Risk. **OR** Explain two tools/techniques for Risk Analysis
2. Write short note on Software Configuration Management. **OR** State and explain the various criteria to be used in selecting Software Configuration management tools.
3. Write short note on Quality management system **OR** Sort note : Software Quality Assurance plan Write short note on Quality Management Systems. **OR** Define Software Quality? Explain How Techniques Help Enhance Software Quality? **OR** Define Software quality. Discuss the importance of software quality. **OR** Explain terms Software reliability and Quality Plans **OR** discuss the techniques to help in enhancing software quality. **OR** Is line of code a good measure of software estimation? Justify. **OR** Discuss the various techniques which are used to enhance Software Quality
4. Discuss Capability Maturity Model (CMM) in detail. **OR** Describe the Five levels of SEI-CMM.