# **ADITYA ENGINEERING COLLEGE(A)**

## **SOFTWARE ENGINEERING** – IMPORTANT QUESTIONS FOR SESSIONALS

## Unit-1

- 1.Explain the challenges faced in software engineering?
- 2. What is the use of software development process models? Explain
- 3.Explain about evaluation of software engineering methodologies
- 4. Explain the key features of the software process models with suitable examples.
- 5. Explain how the principles underlying agile methods lead to the accelerated development and deployment of software.
- 6.Explain the unique nature of Webapps
- 7. Explain Software Myths in detail?
- 8.Explain different process models in detail?
- 9. Differentiate 1.RUP & Agile Process Model 2. Incremental Vs Spiral Process model?

#### Unit 2

- 1. Explain Project Management Essentials in detail?
- 2. Explain Software configuration management with help of neat diagram?
- 3. Summarize Risk Management?
- 4. Explain Project Planning Activities .
- 5. Explain Software metrics and Measurement in detail.
- 6.Illustrate Project Size Estimation & Effort Estimation Techniques.

#### Unit 3

- 1. Differentiate data-oriented requirements analysis and object-oriented requirement analysis.
- 2.Perform prototype analysis on "railway reservation" software.

- 3. What are software requirements? How to analyze the requirements?
- 4. What is requirement engineering? State its process and explain requirements elicitation
- 5.Draw an ER and DFD diagram for Library information System.
- 6.Explain functional and non-functional requirements.
- 7. Explain the following: Requirements Specification, Requirements Validation,

## Requirements management

## Unit 4

- 1.Briefly Explain Software design process and its principles.
- 2. Explain about conducting component level design.
- 3. Write short notes on structured design methodologies
- 4. Explain the Characteristics of Good Software Design.
- 5. Explain the importance and benefits of Software Architecture
- 6.Explain the i)coding principles, ii)coding process, iii)code verification iv) documentation

## Unit 5

- 1.Write about
  - (i) Black box testing.
- (ii) Regression testing.
- (iii) White box testing
- (iv) Integration testing.
- 2. Explain Levels of testing
- 3. Explain the testing objectives and its principles
- 4. Explain Software Quality factors
- 5. Explain verification and validation of software
- 6.Explain CMM model
- 7. Explain Software Reliability.
- 8. Explain Debugging Approaches