Roll No.

## C022612(022)

# B. Tech. (Sixth Semester) Examination, April-May 2022

(AICTE Scheme)

(Computer Science Engg. Branch)

### SOFTWARE ENGINEERING & PROJECT MANAGEMENT

Time Allowed: Three hours

Maximum Marks: 100

Minimum Pass Marks: 35

Note: Attempt all questions. Part (a) of each question is compulsory and carries 4 marks. Solve any two parts from part (b), (c) & (d) and carries 8 marks each.

#### Unit-I

1. (a) What are the 4 main roles of a project manager?

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- (b) Explain Waterfall Model with its advantages and disadvantages.
- (c) What is re-engineering in software engineering?
- (d) What are the five steps in Agile development?

#### Unit-II

- 2. (a) What are the types of feasiblity study?
  - (b) Draw the level 1 Data Flow Diagram (DFD) of a food ordering system.
  - (c) What is Cocomo model in Software Engineering?
  - (d) Explain Data Dictionary in Software Engineering.

#### Unit-III

- 3. (a) What is Work Breakdown Structure?
  - (b) Explain the Project Scope Management.
  - (c) What is the importance of Out Sourcing? Give Pros and cons of Out Sourcing?

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(d) What are the primary process of Project Procurement Management?

#### **Unit-IV**

- **4.** (a) Explain the concept of Quality Management System with its benefit.
  - (b) Explain Pareto Analysis in detail.
  - (c) What is Software Engineering Institute Capability Maturity Model (SEICMM)?
  - (d) Draw the Fishbone Diagram that shows the cause and effect relationship for any quality issue that has arisen or that may arise.

#### **Unit-V**

- **5.** (a) What is Size Oriented Metrics? Give its advantages and disadvantages.
  - (b) Why is ethics so important in leadership? What are the five principles of ethical leadership?

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- (c) Give three main classifications of risks which can affect a software project? Explain the Principle of Risk Management.
- (d) What are the metrics of reliability?