

III B. TECH II SEMESTER REGULAR EXAMINATIONS MAY - 2023
SOFTWARE PROJECT MANAGEMENT
(CSE – INTERNET OF THINGS)

Time: 3 hours

Max. Marks: 70

Note: Answer **ONE** question from each unit (**5 × 14 = 70 Marks**)

~~~~~  
UNIT-I

1. a) How do you create and manage a project plan for a [7M]  
software development project, and what factors should you  
consider when developing it?
- b) What are the most common challenges that arise in [7M]  
software development projects, and how can they be  
overcome?

(OR)

2. a) How do you manage project risks related to infrastructure, [7M]  
and what strategies can you use to mitigate these risks?
- b) What are the steps involved in project planning, and how [7M]  
can they be effectively managed to ensure project success?

UNIT-II

3. a) How can you select the most appropriate software [7M]  
development model for a given project, and what factors  
should you consider when doing so?
- b) What is the waterfall model, and how can it be used to [7M]  
ensure project success? What are its limitations and how  
can they be addressed?

(OR)

4. a) What are some common artifacts produced during the [7M]  
SDLC, and how are they used to support project  
development and management?
- b) Define the roles of project managers and software [7M]  
architects in software development projects, and how can  
they effectively manage project teams and resources?

UNIT-III

5. a) What do you mean by project size estimation and effort [7M]  
estimation and discuss different challenges that come  
across during usage of these techniques.

- b) What is Source Lines of Code (SLOC)? How is it calculated [7M] and used to estimate the size and complexity of software projects?

(OR)

6. a) What is a use case, and how are use cases used in [7M] software development?  
b) Explain about the key components of CPA, and how do [7M] they work together to manage project schedules?

UNIT-IV

7. a) What are the different categories of risks that can arise in [7M] software development projects, and how are they classified?  
b) What is the PERT technique? How is it used to calculate [7M] project timelines and estimates?

(OR)

8. a) Write about the different types of resources that are [7M] typically allocated during development of software projects and how are they managed throughout the project lifecycle?  
b) What factors should be considered in identifying the [7M] resource requirements for a project, and how can these factors be incorporated in scheduling them in the project?

UNIT-V

9. a) What is software quality? Define ISO 9126, and how does [7M] it relate to software quality?  
b) Explain in detail about the process quality metrics. What [7M] are some common metrics used to measure process quality?

(OR)

10. a) What is the role of Quantitative Quality Management [7M] Planning (QQMP) in software project management? Explain it in detail.  
b) Explain in detail their concept of capability maturity model [7M] (CMM) with a neat diagram.

\*\*\*\*\*