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**INSTITUTE OF AERONAUTICAL ENGINEERING**

(Autonomous)

Dundigal-500043, Hyderabad

B.Tech VI SEMESTER END EXAMINATIONS (REGULAR/SUPPLEMENTARY) - JUNE 2025

Regulation: UG-20

SOFTWARE PROJECT MANAGEMENT**Time: 3 Hours**

(COMMON TO CSE | IT | CSE(CS) | CSIT)

Max Marks: 70**Answer ALL questions in Module I and II****Answer ONE out of two questions in Modules III, IV and V****All Questions Carry Equal Marks****All parts of the question must be answered in one place only****MODULE – I**

1. (a) Mention the main characteristics of conventional software performance. Demonstrate in detail about the evolution of software economics. [BL: Understand| CO: 1|Marks: 7]
- (b) Explain briefly about the pragmatic cost estimation. How does pragmatic cost estimation differ from theoretical models? [BL: Understand| CO: 1|Marks: 7]

MODULE – II

2. (a) Outline the core principles of modern software management. Discuss peer inspections and their roles in quality assurance. [BL: Understand| CO: 2|Marks: 7]
- (b) Enlist five strategies to improve software economics. How can team effectiveness be improved in a software project? [BL: Understand| CO: 2|Marks: 7]

MODULE – III

3. (a) Summarize about inception, elaboration, construction, and transition phases with examples. [BL: Understand| CO: 3|Marks: 7]
- (b) List kinds of behavioral and object model. Analyze the role of model-based architectures from a technical perspective. [BL: Apply| CO: 3|Marks: 7]
4. (a) Elucidate the reason why the elaboration phase is critical for architectural stability? Describe management, and engineering artifacts. [BL: Understand| CO: 4|Marks: 7]
- (b) Draw the basic structure of software architecture in modern era with suitable example. Mention the disadvantages of software architecture in technical perspective. [BL: Understand| CO: 4|Marks: 7]

MODULE – IV

5. (a) Classify different types of management indicators, quality indicators. Explain the techniques in project control. [BL: Understand| CO: 5|Marks: 7]
- (b) What are management indicators in software metrics? Discuss the evolution of project organizations and the role of process automation. [BL: Understand| CO: 5|Marks: 7]

6. (a) Write a short notes on process instrumentation. Elaborate different metrics in software organization. [BL: Understand| CO: 5|Marks: 7]
- (b) Discuss how management and quality indicators are used to assess project success? Differentiate between line-of-business and project organizations. [BL: Understand| CO: 5|Marks: 7]

MODULE – V

7. (a) What are the challenges and opportunities in future software project management? Explain modern project profiles. [BL: Understand| CO: 6|Marks: 7]
- (b) Assume a organization with modern management methods and explain the next generation software economics. [BL: Apply| CO: 6|Marks: 7]
8. (a) Mention the challenges faced by organizations when adopting CCPDS-R. Discuss common pitfalls and how they can be overcome during the implementation phase. [BL: Understand| CO: 6|Marks: 7]
- (b) Predict how AI&ML will reshape next-generation software economics. Summarize key lessons from the CCPDS-R case study. [BL: Apply| CO: 6|Marks: 7]

