

22413

24225

3 Hours / 70 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answer with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Assume suitable data, if necessary.
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following:** **10**
- List the characteristics of Software.
 - Define Software. State two types of Software.
 - State the importance of SRS.
 - Define following terms with respect to risk management –
 - Risk identification
 - Risk analysis.
 - Define project cost estimation.
 - List any four software Quality Assurance (SQA) Activity.
 - Define PERT and CPM.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Explain Software Engineering Layered approach with suitable diagram.
 - b) Distinguish between verification and validation of Software. (Any four points)
 - c) Explain 4 P's Management Spectrum.
 - d) Explain work breakdown structure with suitable diagram.
- 3. Attempt any THREE of the following:** **12**
- a) Explain process framework with suitable diagram.
 - b) Explain any four planning principles.
 - c) Draw data flow diagram level 0 and level 1 for a book publishing house.
 - d) Describe different types of risks in software projects.
- 4. Attempt any THREE of the following:** **12**
- a) Differentiate between prescriptive process model and Agile process model. (Any four points)
 - b) Explain the core principles of software engineering practices.
 - c) Explain RMMM strategy.
 - d) Explain function point metrics for size estimation.
 - e) State and explain any four basic principles of project scheduling.
- 5. Attempt any TWO of the following:** **12**
- a) Explain different types of requirements in requirement engineering process.
 - b) Draw and explain translational diagram from requirement model to design model.
 - c) Calculate using COCOMO model –
 - i) Effort
 - ii) Project duration
 - iii) Average staff size
 - iv) ProductivityIf estimated size of project is 200KLOC using organic mode.

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[3]

Marks

6. Attempt any TWO of the following:

12

- a) Draw DFD for Railway Reservation management system for level 0 and level 1.
 - b) Explain CMMI model with neat diagram.
 - c) Explain any six principles of communication practices.
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