

**General Instructions:**

- Write only your registration number on the question paper in the box provided and do not write other information.
- Use statistical tables supplied from the exam cell as necessary
- Use graph sheets supplied from the exam cell as necessary
- Only non-programmable calculator without storage is permitted

**Answer all questions**

Q. No	Sub Sec.	Description	Marks
1		<p>Imagine you are leading a software development project for a critical system in the defense sector. The project involves developing real-time monitoring and alerting software for missile defense systems. The client has provided detailed and well-defined requirements upfront, emphasizing the need for stability and reliability in the software. Identify and elaborate the suitable software development model for this project with proper justifications. List out the advantages and disadvantages of the proposed model.</p>	10
2		<p>Elcot Private Ltd, has been using a traditional waterfall development methodology for several years to build an E-Commerce portal (For example, Amazon) but is now considering transitioning to an agile process to improve agility and responsiveness to customer needs. Elaborate the agile process life cycle that is used to build the software</p>	10

		system and discuss the advantages and disadvantages of the proposed approach.	
3		<p>Perform Function Point Analysis (FPA) for an online word processor with the following data.</p> <p>The components of the system are identified with User Input – 27, User Output – 38, User Inquiry – 21, Internal Logical Files – 32, and External Interface files – 19. The associated weights are considered ‘simple’ for user inputs and outputs, ‘average’ for inquiries, and ‘complex’ for internal and external files. The total Degree of Influence (DI) / Cost Factors (CI) is 55. Estimate the function points for the given system.</p>	10
4	<p>a.</p> <p>b.</p>	<p>Assume that you are working in a fast-food restaurant in which an automated system is used to manage the business needs. The application reads customer orders, notifies orders to the kitchen, calculates the order bill, and process payment. It also maintains inventory information. The application is accessed only by authorized employees and system administrators.</p> <p>As a project manager, discuss in detail the stepwise project planning for the given system.</p> <p>Design the Use Case and Sub Use Case (at least 2) diagrams for the given system.</p>	<p>10</p> <p>10</p>

\*\*\*\*\*All the best \*\*\*\*\*