DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Examination – Summer 2024

Course: B. Tech.   Branch :   Electronics and Computer Engineering / ECSE

Semester : V

Subject Code & Name: BTECPE503D   Software Engineering

Max Marks: 60   Date: 05/07/2024   Duration: 3 Hr.

Instructions to the Students:
1. *All the questions are compulsory.*
2. *The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.*
3. *Use of non-programmable scientific calculators is allowed.*
4. *Assume suitable data wherever necessary and mention it clearly.*

		(Level/CO)	Marks
Q. 1	**Solve Any Two of the following.**		**12**
A)	**List and Explain any four software engineering code of ethics.**		**6**
B)	**With the neat diagram explain the activity model of insulin pump control system**		**6**
C)	**Explain the waterfall model with the help of a diagram,also state its advantages and disadvantages.**		**6**
Q.2	**Solve Any Two of the following.**		**12**
A)	**What is agile software model ? Explain extreme programming for agile development.**		**6**
B)	**Explain and compare functional and nonfunctional requirements in Software Engineering.**		**6**
C)	**Explain term Requirements Elicitation and Requirement Documentation.**		**6**
Q. 3	**Solve Any Two of the following.**		**12**
A)	**Explain in detail context model in system modelling.**		**6**
B)	**Draw an explain software architecture of an ATM system.**		**6**
C)	**Explain Model Driven Engineering.**		**6**
Q.4	**Solve Any Two of the following.**		**12**
A)	**Develop the design of the hospital management system to show the interaction between the data collection sub system and instruments that collect patient data.Use sequence diagram to show this interaction.**		**6**

B)	What is open source development? Explain open source licensing.		**6**
C)	Design structural model for weather information system.		**6**
Q. 5	Solve Any Two of the following.		**12**
A)	What is the difference between validation and verification.		**6**
B)	Explain safety requirements and safety cases in software testing .		**6**
C)	What is software testing? and what is important of it?		**6**
	*** End ***		