GYANMANJARI INNOVATIVE UNIVERSITY
Gyanmanjari Institute of Technology
B.Tech - End Semester Examination (ESE)- Winter-2025

Enrollment No.:_____

Date: 12/12/2025

Subject Code: BETCE15322

Semester: 5

Subject Name: Software Engineering

Total Marks: 100

Time: 02:30PM To 05:30PM

Instructions:

1. Question No. 1 is Compulsory.
2. Make Suitable Assumptions wherever necessary.
3. Figures to the right indicate full marks.

		Marks
Q.1	(a) What are the umbrella activities of a software process?	05
	(b) What is Software Engineering? List down different myths for it.	05
	(c) Write a short note on: formal technical review.	10
Q.2	(a) What is Agility? List down 12 principals of Agile Manifesto.	05
	(b) Describe: FOUR Ps for Project Management.	05
	OR	
	(b) What is Requirement Engineering? List the Functional and Non-Functional requirements for Student Attendance system.	05
	(c) What are the 7C's of DevOps life cycle. Explain it.	10
	OR	
	(c) Explain in detail about incremental process model.	10
Q.3	(a) What are the characteristics of good SRS document?	05
	(b) Explain the principles of a software design.	05
	(c) Discuss SCRUM as agile software development process model.	10
	OR	
	(a) What should be testing approaches for Mobile Applications?	05
	(b) What is Code review? Explain types of code review techniques in software engineering.	05
	(c) List and Explain different categories of Software Risks.	10
Q.4	(a) What is software maintenance? Describe different types of maintenance	05
	(b) Explain software re-engineering process model.	05
	(c) Describe golden rules of User Interface Design.	10
	OR	

(a) What are different layers of Software Engineering? Draw and explain it in short. 05

(b) Give the difference between Validation and Verification. 05

(c) List and explain different types of testing done during testing phase. 10

Q.5 (a) Explain: six sigma 05

(b) Explain Version and Change Control Management. 05

(c) Explain SCM process in details. 10

OR

(a) List and explain the challenges in DevOps Implementation. 05

(b) Draw a use case diagram for library management system. 05

(c) Define Coupling and Cohesion. What is the difference between cohesion and coupling? 10