BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: BCA   SEMESTER : IV
BRANCH: BCA   SESSION : SP/2024

SUBJECT: CA253 PRINCIPLES OF SOFTWARE ENGINEERING

TIME: 3 Hours   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

			CO	BL
Q.1(a)	Illustrate the differences between Abstraction and Decomposition?	[5]	1	2
Q.1(b)	Explain activities carried out during each phase of a spiral model.	[5]	2	2
Q.2(a)	Classify the desirable characteristics of a good Software Requirement Specification document.	[5]	2	2
Q.2(b)	What is final Function Point count? Mention advantages of function point count.	[5]	5	1
Q.3(a)	Explain Data Flow diagram with a suitable example.	[5]	4	2
Q.3(b)	Explain the features represented by a class diagram. Explain the relationships among different types of classes by means of association.	[5]	4	2
Q.4(a)	Explain different levels of SEI Cabability Maturity Model.	[5]	2	2
Q.4(b)	Define and differentiate between block-box testing and white-box testing?	[5]	3	4
Q.5(a)	Explain software maintenance in software engineering. What are the types of software maintenance?	[5]	5	1
Q.5(b)	What do you mean by the term software reverse engineering? Why is it required? Explain the different activities undertaken during reverse engineering.	[5]	5	1

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