August/September 2022
BCA IV SEMESTER
Software Engineering (BCA -17-209)

Time: 3 Hours   Max. Marks:75

Instructions: 1. *It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.*
2. *Answer any four questions from Part -B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

		PART -A	
Q1	(a)	Define Software Engineering.	(1.5)
	(b)	What do you mean by software crisis?	(1.5)
	(c)	What are functional and non-functional requirements?	(1.5)
	(d)	What is the relation between design and implementation?	(1.5)
	(e)	What are the test cases?	(1.5)
	(f)	What do you mean by the configuration management?	(1.5)
	(g)	What is cohesion?	(1.5)
	(h)	What is data dictionary?	(1.5)
	(i)	What do you mean by size estimation?	(1.5)
	(j)	What do you mean by risk management?	(1.5)
		PART -B	
Q2	(a)	What are the characteristics of a good software requirement specification (SRS)? Document?	(8)
	(b)	What is the use of software development process models? Explain the waterfall model.	(7)
Q3		What is requirement elicitation? Explain the various techniques of requirement elicitation.	(15)
Q4	(a)	What do you mean by the software testing? Explain the types of software testing.	(9)
	(b)	What is Coupling? Explain the various types of the coupling.	(6)
Q5	(a)	What are the factors affecting the cost of the software? Give a detailed description of constructive cost model (COCOMO).	(10)
	(b)	Explain the role of management in software development.	(5)

Q6	(a)	What is software maintenance? Explain the process of maintenance of the software.	(8)
	(b)	Define data structures metrics. How can we calculate amount of data in a program. Explain it.	(7)
Q7		Write short note on following. (a) Halstead's software science measures (b) Reverse Engineering (c) Good Coding style	(3*5)

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