

## V Semester B.C.A. Degree Examination, March 2023 (Y2K14 – CBCS) (F + R) COMPUTER SCIENCE BCA – 502 : Software Engineering

Time: 3 Hours Max. Marks: 100

Instruction : Answer all Sections.

## SECTION - A

I. Answer any ten questions.

 $(10 \times 2 = 20)$ 

- 1) Differentiate between generic and customised software products.
- 2) What are the ethical and professional responsibilities of software engineer?
- 3) What are the human factors in software engineering?
- 4) Define prototyping in software process.
- 5) What is cohesion?
- 6) What are the concurrent objects?
- 7) What do you mean by interface evaluation?
- 8) Define software reliability.
- 9) What is reliability growth modeling?
- 10) What is statistical testing?
- 11) What is the purpose of test case?
- 12) What is feasibility study?

## SECTION - B

II. Answer any five questions.

 $(5 \times 5 = 25)$ 

- 13) Explain about risk management.
- 14) Discuss in detail about Software Requirement Specification (SRS).



- 15) What are the design strategies ?
- 16) Write a short note on domain specific architecture.
- 17) What is exception handling ? Explain.
- 18) Explain about fault avoidance and tolerance.
- 19) Discuss about clean room software development.
- 20) Explain about software cost estimation.

## SECTION - C

III. Answer any three questions.		(3×15=45)
a)	With a neat diagram explain spiral model.	10
b)	What are the social 7 organisational factors?	5
a)	Discuss in detail about requirement engineering process.	10
b)	What is content model ? Explain.	5
a)	What are the prototyping techniques?	10
b)	Write a short note on design quality.	5
a)	Explain object oriented design with example.	8
b)	What is coupling? Explain different types of coupling in brief.	7
a)	What are the software reliability metrics?	10
b)	Briefly explain about types of testing.	5
	SECTION - D	
IV. Answer any one question.		(1×10=10)
26) Discuss about functional and non-functional requirements.		
Ex	plain in detall about project management.	
	a) b) a) b) a) b) a) b) c)	<ul> <li>a) With a neat diagram explain spiral model.</li> <li>b) What are the social 7 organisational factors?</li> <li>a) Discuss in detail about requirement engineering process.</li> <li>b) What is content model? Explain.</li> <li>a) What are the prototyping techniques?</li> <li>b) Write a short note on design quality.</li> <li>a) Explain object oriented design with example.</li> <li>b) What is coupling? Explain different types of coupling in brief.</li> <li>a) What are the software reliability metrics?</li> <li>b) Briefly explain about types of testing.</li> <li>SECTION - D</li> <li>swer any one question.</li> <li>Discuss about functional and non-functional requirements.</li> </ul>