

IV Semester B.C.A. Examination, June/July 2026
(SEP 2024 – 25)

COMPUTER APPLICATIONS
24BCA43 : Software Engineering

Time : 3 Hours

Max. Marks : 80

Instruction : Answer all the Parts.

PART – A

I. Answer any eight questions. Each question carries two marks. (8×2=16)

- 1) Define Software Engineering.
- 2) What is agility ?
- 3) Define Scrum.
- 4) What is risk projection ?
- 5) List two estimation techniques in project planning.
- 6) Define software risk.
- 7) List any two characteristics of a good design.
- 8) Define use case diagram.
- 9) What is end-of-life (EOL) in product sustenance ?
- 10) Define release planning.

PART – B

II. Answer any four questions. Each question carries six marks. (4×6=24)

- 11) Explain the waterfall model with advantages and disadvantages.
- 12) Explain agile principles and agile methods.
- 13) Discuss reactive and proactive risk management strategies.
- 14) Explain black box testing and white box testing in detail.
- 15) Explain validation testing and system testing with examples.
- 16) Discuss software quality assurance and formal technical reviews.

SE-540 32

PART - C

(5×8=40)

III. Answer any five questions. Each question carries eight marks.

- 17) Explain the layered technology and process framework in detail.
- 18) Describe the requirements engineering process with a neat diagram.
- 19) Discuss plan-driven vs agile development.
- 20) Explain software quality metrics with examples.
- 21) Explain in detail design process, design quality and architectural design.
- 22) Describe release management with release planning, strategies and post deployment monitoring.
- 23) Explain product sustenance covering maintenance, updates, end-of-life and migration strategies.