



IV Semester B.C.A. Examination, June/July 2025
(NEP) (F+R)
COMPUTER APPLICATIONS
4.1 : Software Engineering

Time : 2½ Hours

Max. Marks : 60

Instruction : Answer all the Sections.

SECTION – A

I. Answer **any four** questions. **Each** question carries **two** marks. **(4x2=8)**

- 1) What is prototype model ?
- 2) Define feasibility study.
- 3) What is software scheduling ?
- 4) What are the objectives of prototyping ?
- 5) What is task set and task network ?
- 6) What is alpha testing ?

SECTION – B

II. Answer **any four** questions. **Each** question carries **five** marks. **(4x5=20)**

- 7) Explain the phases of spiral model.
- 8) Discuss the phases of software development life cycle.
- 9) What is scrum ? Explain scrum team and scrum events.
- 10) What is system testing ? Explain different types of testing performed in system testing.
- 11) What is Gantt chart ? Describe the components of Gantt chart.
- 12) Explain the ISO standards for software industry.



SECTION – C

- III. Answer **any four** questions. **Each** question carries **eight** marks. **(4×8=32)**
- 13) Explain classical waterfall life cycle model. 8
- 14) a) Explain core agile values. 4
b) What are functional requirements ? Explain the ways of representing the functional requirements. 4
- 15) a) Explain the roles and responsibilities of project manager. 4
b) What is black box testing ? What are its characteristics ? 4
- 16) a) Explain cleanroom process model. 4
b) Explain project scheduling process. 4
- 17) a) What is risk mitigation ? Explain the approaches to risk mitigation and techniques of risk mitigation. 4
b) What is re-engineering ? Explain the process. 4
- 18) a) Explain software improvements process. 4
b) Illustrate the features of software configuration management. 4