



NP – 1018

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. (4×2=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. (4×5=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.

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## SECTION – C

III. Answer **any four** questions. **Each** question carries **eight** marks. **(4×8=32)**

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|---|---|
| 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 |
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