



NP – 434

IV Semester B.C.A. Examination, July/August 2024

(NEP)

COMPUTER SCIENCE

4.1 : Software Engineering

Time : 2½ Hours

Max. Marks : 60

Instruction : Answer all the Parts.

PART – A

- I. Answer **any four** questions. **Each** question carries **two** marks : **(4×2=8)**
- 1) What is software engineering ?
 - 2) Why feasibility study is important in a project ?
 - 3) What is problem decomposition ?
 - 4) What is earned value analysis ?
 - 5) Define verification and validation.
 - 6) What is baseline in software configuration management ?

PART – B

- II. Answer **any 4** questions. **Each** question carries **five** marks : **(4×5=20)**
- 7) Explain classical waterfall model.
 - 8) What are the stages in Agile process model ? Explain.
 - 9) Explain 4 P's management spectrum.
 - 10) What are the steps involved in unit-test procedures in conventional software ?
 - 11) Explain software project scheduling process.
 - 12) What is Software Configuration and Software Configuration Items (SCI) ?

P.T.O.



PART – C

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

- 13) When to choose spiral model and explain the model in detail with a diagram. **8**
- 14) a) What is extreme programming (XP) ? Explain the XP process. **4**
b) What are functional requirements ? Explain the ways of representing the functional requirements. **4**
- 15) a) Explain clean room process model. **4**
b) Explain forward reengineering. **4**
- 16) a) What is black box testing and explain the levels of black box testing. **4**
b) Explain W5HH principles. **4**
- 17) a) Explain the classification of software risk based on identifiability and predictability. **4**
b) Why the software should be maintained ? **4**
- 18) a) Explain the process for Software Process Improvement (SPI). **4**
b) What is the purpose of 'SCM' repository ? **4**
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