

## SOFTWARE ENGINEERING

[Maximum Marks : 50]

Time : 2:30 Hours]

## NOTES:

- i) Attempt all questions.
- ii) Students are advised to specially check the Numerical Data of question paper in both versions. If there is any difference in Hindi Translation of any question, the students should answer the question according to the English version.
- iii) Use of Pager and Mobile Phone by the students is not allowed.

[2×5=10]

Q1) Attempt any two parts of the following.

- a) What is function oriented design and object oriented design? Explain it with example.
- b) Compare waterfall and spiral model of software development.
- c) What is SRS? Explain the characteristics of good SRS.

[2×5=10]

Q2) Attempt any two parts of the following.

- a) Compare different types of COCOMO model with its advantages and disadvantages.
- b) Explain various types of systems in software engineering.
- c) Explain briefly classic waterfall model.

[2×5=10]

Q3) Attempt any two parts of the following.

- a) What is V model in software testing, explain it with diagram.
- b) What is prototyping model? Under what circumstances it is beneficial to construct a prototyping model.
- c) Explain the role and responsibilities of software project manager?

[2×5=10]

Q4) Attempt any two parts of the following.

- a) What are the four core principles of Agile methodology.
- b) Explain various types of metrics that are used for project size estimation.
- c) What is DFD. Explain different components of DFD.

[2×5=10]

Q5) Attempt any two parts of the following.

- a) Explain why spiral model is considered to be a meta model.
- b) Differentiate between black box testing and white box testing.
- c) What is cohesion and coupling? What should be the status of coupling and cohesion for ideal system.