

National Institute of Technology Kurukshetra

BTech(IT) 3rd Semester End Term Exam, Nov/Dec 2020

Course Code: **ITPC-27**

Maximum Marks:**50**

Course Name: **Software Engineering**

Time Allowed: **2:30 Hours**

Total No. of questions to be attempted: **05**

Total No. of Questions: **06**

Note: Question no.01 is compulsory. Attempt any four questions between Q no. 02 to 06.

Q. 1 Answer the following (**briefly**) (2*5)

- a) Describe the characteristics of an SRS document.
- b) Define Software metrics.
- c) What are the characteristics to be considered for the selection of the life cycle model?
- d) What do you understand with the term “requirements elicitation”?
- e) Write short notes on following,
 - (i) Data flow diagram
 - (ii) Data dictionary.

(Attempt any 04 Questions, between Q.No 02-06)

- Q. 2** a) What is Function point analysis (FPA) (5,5)
- b) Discuss the differences between object-oriented and function-oriented design. Which design strategy is most popular and practical?
- Q. 3** a) Describe all the steps in Requirement Analysis. (5,5)
- b) What is coupling and cohesion? Discuss in brief with their types.
- Q. 4** a) Difference between verification and validation. (5,5)
- b) What are the objectives of testing? Differentiate between integration testing and system testing.
- Q. 5** a) List the advantages of using waterfall model instead of adhoc build and fix model? (5,5)
- b) Discuss the prototyping model. What is the effect of designing a prototype on the overall cost of the project?
- Q. 6** a) Describe the post architecture model? (5,5)
- b) Define Risk assessment and Risk control?

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