

R16

Code No: 135BM

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, November/December - 2018

SOFTWARE ENGINEERING

(Common to CSE, IT)

Max. Marks: 75

Time: 3 hours

Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units: Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A

(25 Marks)

- 1.a) What are the merits of incremental model? [2]
- b) List the task regions in the spiral model. [3]
- c) What is feasibility study? [2]
- d) What are the differences between functional requirements and non-functional requirements? [3]
- e) List the guidelines for data design. [2]
- f) Name the commonly used architectural styles. [3]
- g) Write a short note on black box testing. [2]
- h) How to compute the cyclomatic complexity? [3]
- i) Differentiate between reactive risk and proactive risk strategies. [2]
- j) What is software reliability and how this parameter helps in managing software quality? [3]

PART - B

(50 Marks)

- 2.a) What is legacy software? Explain briefly its impact in software engineering.
- b) Explain the following:
 - i) Water fall model
 - ii) Spiral Model. [5+5]

OR

- 3.a) Give an overview of unified process model. [5+5]
- b) Write detailed notes on CMMI.
- 4.a) Describe five desirable characteristics of a good software requirement specification document.
- b) Draw the complete DFD at least up to 2-levels for a library management system. [5+5]

OR

- 5.a) Compare ISO and SEI-CMM models.
- b) Who should be involved in a requirement review? Draw a process model showing how a requirements review might be organized. [5+5]