

**R18**

Code No: 155DB

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech III Year I Semester Examinations, March - 2021**

**SOFTWARE ENGINEERING**

(Common to CSE, IT)

**Time: 3 Hours**

**Max. Marks: 75**

**Answer any five questions  
All questions carry equal marks**

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- 1.a) Explain Software development process models. [7+8]  
b) Explain about evaluation of software engineering methodologies.
- 2.a) What is the goal of requirements analysis phase? Give reasons why the requirements analysis phase is a difficult one.  
b) Identify and briefly describe four types of requirement that may be defined for a computer based system. [8+7]
3. What are the design principles of a good software design? Explain. [15]
4. What is black box testing? Is it necessary to perform this? Explain various test activities. [15]
- 5.a) Discuss briefly about Pro-active and Re-active Risk strategies in detail.  
b) Explain about Software risks in detail. [8+7]
- 6.a) How system modeling is achieved using UML? Explain with a suitable example.  
b) How we perform design evaluation? Explain it with suitable example. [8+7]
- 7.a) What is a change? How it can be incorporated in the software.  
b) What is the difference between verification and validation? Explain with an example. [8+7]
- 8.a) What is software maintenance? How to control maintenance cost.  
b) Define software. List and explain about the elements of a software process. [8+7]

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