

**Code No: 155DB****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year I Semester Examinations, September - 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 about evaluation of software engineering methodologies.  
b) What are the challenges of software engineering? [8+7]
- 2.a) Explain Software development process models.  
b) Write a short note on Waterfall model. [7+8]
- 3.a) Explain the importance of software specification of requirements.  
b) Write a short note on Context Model. [7+8]
4. Describe various prototyping techniques and discuss on object oriented analysis and modeling. [15]
5. Briefly explain about the following:  
a) Sequence diagram  
b) Use case diagram. [7+8]
6. What are the design principles of a good software design? Explain. [15]
- 7.a) What is testing? How is it different from debugging?  
b) Explain various structural testing techniques with suitable examples. [7+8]
- 8.a) List and explain the various software quality factors.  
b) Describe the role of software reviews in achieving good quality software. [7+8]

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