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Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Fifth Semester B.Tech Degree (Minor) Examination December 2021 (2019 admn.)

Course Code: CST 381
Course Name: CONCEPTS IN SOFTWARE ENGINEERING

Max. Marks: 100   Duration: 3 Hours

PART A

(Answer all questions; each question carries 3 marks)   Marks

1	What are the advantages and disadvantages of waterfall model?	3
2	Explain about agility process model.	3
3	How does Personas and User stories help the design team?	3
4	Mention any three characteristics that could be used to evaluate a software design.	3
5	What are the different types of software licenses?	3
6	What is difference between white box and black box testing?	3
7	Mention some of the common risks in software development projects?	3
8	How does Kanban methodology satisfy the goals of Lean approach?	3
9	Define software Quality. What is software quality dilemma in software engineering?	3
10	Compare ISO and SEI-CMM models.	3

PART B

(Answer one full question from each module, each question carries 14 marks)

Module -1

11 a) What is the use of software development process models? List out the advantages   7
and disadvantages of Incremental model.

b) How is Agile different from traditional project management?   7

12 a) How does Boehm's Spiral Model handle the need for risk management?   6

b) List out the principles of Agile Manifesto.   8

Module -2

13 a) Why is an SRS needed in a software project? What are the advantages with it?   7

b) What is the purpose of requirement elicitation? Describe various techniques for requirement elicitation.   7

14 a) Explain design within the context of software engineering.   8

b) What is component level design? Which models are required for deriving component level design?   6

Module -3

15 a) What do you understand by System Testing? What are the different kinds of system testing that are usually performed on large software testing?   8

b) List out the benefits of automation in DevOps.   6

16 a) What are the five steps of Test Driven Development?   6

b) What are the main software maintenance activities? Explain.   8

Module -4

17 a) Explain various risks associated with software project. How are they managed?   7

b) Discuss the COCOMO Model as cost estimation Model.   7

18 a) Discuss Software configuration Management plan and its need.   7

b) What is Scrum Framework? How does it work?   7

Module -5

19 a) Explain briefly Software Quality Assurance tasks.   7

b) What do you mean by software metrics? Explain with an example.   7

20 a)   7
Explain Software Process Improvement with various elements of SPI framework.

b) Write a short note on the capability maturity model.   7

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