

Roll No.

Total Pages : 03

BT-7/M-20

37152

AGILE SOFTWARE ENGINEERING

CSE-421N

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Identify the technical differences among Agile manifesto and Agile principles. **8**
- (b) Explain the Iterative and Incremental development in Agile. How do you deal when requirements change frequently ? **7**
2. Explain the following terms in context of agility :
 - (a) Pair programming **8**
 - (b) Software refactoring. **7**

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Unit II

3. (a) Identify and explain the roles of the following :
- (i) Scrum master and Scrum team 4
 - (ii) Burn down chart and Burn up chart. 4
- (b) How to carry the sprint planning and retrospective for Agile scrum framework development ? What is Product backlog and Sprint backlog ? 7
4. Explain the following Agile Scrum terms :
- (a) Scrum ban 5
 - (b) Zero sprint 5
 - (c) Sprint backlog. 5

Unit III

5. (a) How the Agile life-cycle makes an effective impact on software testing ? Justify your answer with a suitable Agile project model. 8
- (b) List the different types of testing techniques used in Agile software engineering and write the significance of each testing technique. 7
6. (a) Explain the significance of using xUnit framework and their tools for supporting Test Driven Development in different test case scenarios. 10
- (b) How is test automation done in Agile testing ? 5

Unit IV

7. Define dependency inversion principle and interface segregation principle. Identify the key roles of using dependency inversion principle and interface segregation principle in Agile software designs. **15**
8. Explain the following with the help of Agile software design and development : **5**
- (a) Version control mechanism **5**
 - (b) Open closed principle **5**
 - (c) Liskov substitution principle. **5**