B.Tech. DEGREE EXAMINATION, MAY 2022
Sixth Semester

18CSE469T – SOFTWARE PROCESS AND AGILE PRACTICES
(For the candidates admitted from the academic year 2018-2019 to 2019-2020)

Note:
(i) **Part - A** should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40ᵗʰ minute.
(ii) **Part - B** should be answered in answer booklet.

Time: 2½ Hours   Max. Marks: 75

PART – A (25 × 1 = 25 Marks)
Answer **ALL** Questions

	Marks	BL	CO	PO
1. _____ is called a self-contained mini project composed of activities	1	1	1	1

  (A) Project   (B) Iteration
  (C) Process   (D) Product

	Marks	BL	CO	PO
2. Which is the practice followed by fixing the iteration end date and not allowing to change.	1	2	1	1

  (A) Risk driven planning   (B) Project planning
  (C) Adaptive planning   (D) Time boring

	Marks	BL	CO	PO
3. Which process repeatedly delivers a workable system to the market place	1	2	1	1

  (A) Iterative process   (B) Incremental delivery
  (C) Linear sequential process (D) Prototyping

	Marks	BL	CO	PO
4. In which process the changes happen rapidly.	1	1	1	1

  (A) Agile   (B) Prototyping
  (C) Rapid application model (D) Spiral model

	Marks	BL	CO	PO
5. In Agile development environment, when acceptance testing is performed	1	2	1	1

  (A) When customer requests   (B) When system is ready
  (C) At the end of each iteration (D) Daily

	Marks	BL	CO	PO
6. At the end of the sprint _____ is delivered	1	1	2	1

  (A) A document containing test cases for the current sprint   (B) An architectural design of the solution
  (C) An increment of done software   (D) Wireframe designs for user interface

	Marks	BL	CO	PO
7. What is the main responsibility of a tester in an agile environment?	1	1	2	1

  (A) Create test scenarios and test cases   (B) Finding bugs
  (C) Create automation scripts   (D) There is no role as a tester in scrum

---

PART – B (5 × 10 = 50 Marks)
Answer **ALL** Questions

	Marks	BL	CO	PO
26. a. Compare and contrast the principles followed in plan driven models with Agile models.	10	4	1	1

(OR)

	Marks	BL	CO	PO
26. b. Waterfall model is following systematic and sequential approach. Evaluate the principles followed by waterfall model and compare over agile principles.	10	4	1	1

	Marks	BL	CO	PO
27. a. List and explain the key motivations of Iterative development in Agile software process.	10	4	2	1

(OR)

	Marks	BL	CO	PO
27. b. Your team is responsible for development and implementation of software to be used in all major railway stations of our country to assist passengers in inquires related to arrival and departure of train. How will you prioritize the requirements? Identify the requirements for product back log and sprint backlog. Recommend which practice to be used? Is it necessary to follow a model based approach?	10	4	2	1

	Marks	BL	CO	PO
28. a. If you are an XP coach what practices would you adopt and follow in your company and also specify the 12 core practices of XP that you will recommend to your team.	10	4	3	3

(OR)

	Marks	BL	CO	PO
28. b. Which practice focuses more on Architecture significant elements and Risk analysis and also elaborate its life cycle phases with work products.	10	4	3	3

	Marks	BL	CO	PO
29. a. Does the project environment include only the physical space and software tools used by the developers? If not what are the specific tools used for Agile Environment?	10	3	4	3

(OR)

	Marks	BL	CO	PO
29. b. How requirements are collected effectively in Agile software process? What are the different technique used for requirement elicitation list? Explain.	10	3	4	3

	Marks	BL	CO	PO
30. a. Does Agile build quality into the product through a combination of practices? If so what are the Agile approaches followed towards Quality assurance.	10	3	5	2

(OR)

	Marks	BL	CO	PO
30. b. What is feature driven development? Specify the primary roles and practices involved in FDD.	10	3	5	2

* * * * *

8. In agile software process when can a sprint be cancelled? 1 2 2 1
   - (A) The sprint items are no longer needed
   - (B) Sprint can never be cancelled
   - (C) When development is unable to complete the work
   - (D) Whenever the product owner says

9. The burn down chart is displayed during _____. 1 1 2 1
   - (A) Project progress
   - (B) Amount of remaining work with respect to time
   - (C) The velocity of the team
   - (D) The capacity of the team members

10. When is a sprint over in scrum? 1 2 2 1
    - (A) When all the sprint backlog items are completed
    - (B) When the product owner suggests
    - (C) When all the sprint backing tasks are completed
    - (D) When the time box expires

11. In _____ phase of UP, the system is eventually deployed and a release candidate is exposed for review and feedback. 1 2 3 2
    - (A) Transition
    - (B) Elaboration
    - (C) Release development
    - (D) Refinement

12. Identify the most important values and principles to be followed in XP practices 1 2 3 2
    - (A) Incremental infrastructure
    - (B) Simplicity and incremental approach
    - (C) Onsite customer
    - (D) Communication, simplicity and feedback

13. In an unified process, the development team includes the following members. Analyse which of them are in the development team. 1 1 3 3
    - (A) Customer
    - (B) Tester, implementer, software architect, system analyst
    - (C) Project manager, process engineer
    - (D) Technical writer, graphic artist

14. What are the work products used in project management phase of EVO in agile? 1 2 3 2
    - (A) Design specification
    - (B) Change management
    - (C) Performance requirement specification
    - (D) Evo plan and impact estimation table

15. Coach and tracker are the two main roles who has a great influence in _____ part of the process of XP. 1 1 3 3
    - (A) Development
    - (B) Management
    - (C) Customer
    - (D) Technical

16. In which process of project planning in agile there is no detailed plan of all the iteration in future. Identify which process is that 1 1 4 2
    - (A) Rolling wave planning
    - (B) Adaptive planning
    - (C) Client driven planning
    - (D) Requirement planning

17. This kind of iterative approach is very commonly found in scurm, identify which one among the following 1 1 4 3
    - (A) XP
    - (B) EVO
    - (C) Scrum of scrum
    - (D) Rolling wave planning

18. Point out the correct statement 1 2 4 2
    - (A) Problem with predictive planning is that it is misapplied to software projects
    - (B) Predictive planning can be used for all the software project
    - (C) Day by day or iteration by iteration schedule of the path to the success
    - (D) Is good for projects with changing scope

19. Which among the following is not the iteration goals in an agile project environment? 1 1 4 3
    - (A) Risk
    - (B) Coverage
    - (C) Skills development
    - (D) Cost

20. ____ requires partial implementations in the earlier iterations if it is not risk 1 1 4 3
    - (A) Architecturally significant use cases
    - (B) Coverage
    - (C) Critically
    - (D) IID

21. To measure the size of a user story for an Agile project what is the unit of measurement that is used to? 1 2 5 2
    - (A) Function points
    - (B) Story points
    - (C) Velocity points
    - (D) Work breakdown points

22. Exploratory testing uses _____ to quickly identifying new types of problems with the software. 1 1 5 2
    - (A) Test cases
    - (B) Scripted tests
    - (C) Un-scripted
    - (D) Test plan

23. Identify which type of stories are used for activities like research, exploration, design, prototyping? 1 1 5 2
    - (A) Spikes
    - (B) User stories
    - (C) Sprint zero
    - (D) Velocity

24. The time bar review meeting is a chance to review the _____ 1 1 5 2
    - (A) Requirements
    - (B) Project as whole
    - (C) Customer feedback
    - (D) Manager feedback

25. In _____ testing elaborates the brief descriptions provided by user story 1 2 5 2
    - (A) Acceptance
    - (B) Unit
    - (C) Exploratory
    - (D) Smoke