Enrollment No…..................................

Faculty of Engineering
End Sem (Odd) Examination May-2022
OE00015 Agile Development

Programme: B.Tech.   Branch/Specialisation: All

Duration: 3 Hrs.   **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1 i. Which of the given options comes under the Agile Manifesto and its principles? **1**
(a) Collaboration with customer
(b) Making necessary changes whenever required in the project
(c) Interaction and self-organization
(d) All of these

ii. Which one of the options is the main difference between scrum and agile? **1**
(a) Agile is a procedure whereas scrum is practice
(b) Scrum is a procedure and agile is a practice
(c) Scrum is a large spectrum whereas agile is the form of scrum itself
(d) Scrum is incremental and agile is not

iii. What is the role of a scrum master in agile? **1**
(a) Management of the project team
(b) Team motivation
(c) Managing issues and problems of team and project
(d) All of these

iv. Which of the following options is the type of an agile framework? **1**
(a) Kanban   (b) Feature driver development
(c) Test-driven development   (d) All of these

v. What is a story point in the agile model? Choose one from the given options. **1**
(a) A state of the project
(b) The initial stage of a project
(c) Estimate of required efforts for a project
(d) None of these

vi. Which one of the options is the correct statement for the sprint **1**
planning meeting?
(a) A discussion between client, scrum master and the team
(b) A meeting of only scrum team members
(c) A meeting of scrum masters only
(d) None of these

vii. Which one of these is an open-ended cost structure- **1**
(a) Fixed price structure
(b) Time and materials project
(c) Not to exceed project
(d) Fixed time project

viii. Scrum Team velocity can be increased by: **1**
(a) Avoid project roadblocks
(b) Solicit input from team
(c) Both (a) & (b)
(d) None of these

ix. Optimal time to move to an agile approach from a traditional **1**
approach is-
(a) At the end of large project   (b) Change in leadership
(c) Both (a) & (b)   (d) None of these

x. "Diluting until dead" means- **1**
(a) Trying to complete agile process in addition to waterfall processes
(b) An ineffective or indecisive product owner
(c) Watering down agile process with old waterfall habits
(d) None of these

Q.2 i. Write Agile Manifesto for Agile development. **2**
ii. Describe Agile Litmus test. **3**
iii. Describe Agile principles of customer satisfaction & principle of **5**
quality.
OR iv. Write benefits of Agile development. **5**

Q.3 i. Compare Lean & Scrum. **2**
ii. Describe various attributes which development team should embrace **8**
to change team philosophy.
OR iii. Describe key practices of Extreme programming. **8**

Q.4 i. Define theme, feature & user stories. **3**

ii. What do you mean by release planning? Describe steps to create a **7**
release plan.
OR iii. Define Sprint Backlog. Describe various activities performed in **7**
sprint planning meeting.

Q.5 i. Define velocity of scrum team. How it is calculated? **3**
ii. Discuss the ways in which risk can be managed in agile development. **7**
OR iii. Describe various proactive quality practices to improve quality of **7**
product.

Q.6 Attempt any two:
i. Discuss the role of Agile Champion & Agile Transition team. **5**
ii. Describe qualities of Scrum Master. **5**
iii. Discuss key benefits of Agile project management. **5**

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Scheme of Marking - OE00015 Agile Development

Q.1 i.   Which of the given options comes under the Agile Manifesto and its   1
          principles?
          (d) All of these
     ii. Which one of the options is the main difference between scrum and   1
          agile?
          (b) Scrum is a procedure and agile is a practice
     iii. What is the role of a scrum master in agile?   1
          (d) All of these
     iv. Which of the following options is the type of an agile framework?   1
          (d) All of these
     v.   What is a story point in the agile model? Choose one from the given   1
          options.
          (c) Estimate of required efforts for a project
     vi. Which one of the options is the correct statement for the sprint   1
          planning meeting?
          (a) A discussion between client, scrum master and the team
     vii. Which one of these is an open-ended cost structure-   1
          (b) Time and materials project
     viii. Scrum Team velocity can be increased by: 1
          (c) Both (a) & (b)
     ix. Optimal time to move to an agile approach from a traditional   1
          approach is-
          (c) Both (a) & (b)
     x.   "Diluting until dead" means-   1
          (c) Watering down agile process with old waterfall habits

Q.2 i.   Write Agile Manifesto for Agile development.   2
     ii. Agile Litmus test.   3
          As per explanation
     iii. Agile principles of customer satisfaction   2 marks   5
          Agile principle of quality   3 marks
OR   iv. Benefits of Agile development   5 marks   5
          As per explanation

Q.3 i.   Lean & Scrum each   (2*1) marks   2
     ii. Each attribute   (2*4) marks   8
OR   iii. Each practice of Extreme programming   (2*4) marks   8

Q.4 i.   Define theme   1 mark   3
          Define feature   1 mark
          Define user stories   1 mark

     ii. Define release planning   2 marks   7
          Steps to create a release plan-
          Revising the product backlog   2.5 marks
          Creating the release plan   2.5 marks
OR   iii. Define Sprint Backlog   2 marks   7
          Activities performed in sprint   (2.5 *2) marks

Q.5 i.   Define velocity of scrum team   1 mark   3
          Calculated method   2 marks
     ii. Discuss the ways in which risk can be managed in agile development.   7
OR   iii. Various proactive quality practices   (3.5*2) marks   7

Q.6   Attempt any two:
     i.   Role of Agile Champion   2 marks   5
          Agile Transition team   3 marks
     ii. Each quality of Scrum Master   (1*5) marks   5
     iii. Benefits of Agile project management   (1*5) marks   5

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