

Total No. of Questions: 6

Total No. of Printed Pages:3

Enrollment No.....



Faculty of Engineering
End Sem Examination May-2023

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. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- Q.1 i. Agile Software Development is based on- 1
(a) Incremental development (b) Iterative development
(c) Linear development (d) Both (a) and (b)
- ii. Which of the following is not an agile method? 1
(a) XP (b) 4GT (c) AUP (d) All of these
- iii. How many phases are there in scrum? 1
(a) Two
(b) Three
(c) Four
(d) Scrum is an agile method which means it does not have phases
- iv. _____ four framework activities found in the extreme 1
programming.
(a) Analysis, design, coding, testing
(b) Planning, analysis, design, coding
(c) Planning, design, coding, testing
(d) Planning, analysis, coding, testing
- v. Which of the following does not apply to agility to a software 1
process?
(a) Uses incremental product delivery strategy
(b) Only essential work products are produced
(c) Eliminate the use of project planning and testing
(d) All of these

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| vi. | Product backlog should be ordered on the basis of _____. | 1 |
| | (a) Value of the items being delivered | |
| | (b) The complexity of the items being delivered | |
| | (c) Size of the items being delivered | |
| | (d) The risk associated with the items | |
| vii. | Which of the following process is concerned with analysing the costs and benefits of proposed changes? | 1 |
| | (a) Change management (b) Version management | |
| | (c) System building (d) Release management | |
| viii. | What assess the risk and your plans for risk mitigation and revise these when you learn more about the risk? | 1 |
| | (a) Risk monitoring (b) Risk planning | |
| | (c) Risk analysis (d) Risk identification | |
| ix. | Which method recommends that very frequent system builds should be carried out with automated testing to discover software problems? | 1 |
| | (a) Agile method (b) Parallel compilation method | |
| | (c) Large systems method (d) All of these | |
| x. | In Scrum, when is a Sprint Over? | 1 |
| | (a) After completing all the sprint backlog items | |
| | (b) After completing all the sprint backlog tasks | |
| | (c) After completing the final testing | |
| | (d) When the time box expires | |
| Q.2 | i. What are some important parts of agile process? | 4 |
| | ii. What are agile methods? What are the principles behind agile manifesto? | 6 |
| OR | iii. Differentiate between the agile software development model and waterfall model. | 6 |
| Q.3 | Attempt any two: | |
| | i. What is meant by lean approach? How does it work? | 5 |
| | ii. Explain various roles in agile process. How are these roles different from traditional roles. | 5 |
| | iii. What are various advanced scrum applications? Explain each of them. | 5 |

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| Q.4 | i. How do you write a product vision in scrum? | 3 |
| | ii. What is the working principle of agile? What value is provided by agile? Discuss. | 7 |
| OR | iii. What is the purpose of sprint retrospective in scrum? Also explain sprint planning. | 7 |
| Q.5 | i. What are the most critical agile metrics? | 4 |
| | ii. List some agile project management tools and their roles in project planning. | 6 |
| OR | iii. Explain risk management in agile. | 6 |
| Q.6 | Attempt any two: | |
| | i. When we should not use agile? Write major challenges with agile project management. | 5 |
| | ii. What are the essential qualities to have as a scrum master? | 5 |
| | iii. Explain tools used for agile project management. | 5 |

Marking Scheme

OE00015 Agile Development

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|-----|-------|--|----------|---|
| Q.1 | i) | Agile Software Development is based on | 1 | |
| | d) | Both Incremental and Iterative Development | | |
| | ii) | Which of the following is not an agile method? | 1 | |
| | b) | 4GT | | |
| | iii) | How many phases are there in Scrum? | 1 | |
| | b) | Three | | |
| | iv) | _____ four framework activities found in the Extreme Programming. | 1 | |
| | c) | planning, design, coding, testing | | |
| | v) | Which of the following does not apply to agility to a software process? | 1 | |
| | c) | Eliminate the use of project planning and testing | | |
| | vi) | Product Backlog should be ordered on the basis of _____. | 1 | |
| | a) | Value of the items being delivered | | |
| | vii) | Which of the following process is concerned with analysing the costs and benefits of proposed changes? | 1 | |
| | a) | Change management | | |
| | viii) | What assess the risk and your plans for risk mitigation and revise these when you learn more about the risk? | 1 | |
| | a) | Risk monitoring | | |
| | ix) | Which method recommends that very frequent system builds should be carried out with automated testing to discover software problems? | 1 | |
| | a) | Agile method | | |
| | x) | In Scrum, when is a Sprint Over? | 1 | |
| | d) | When the time box expires | | |
| Q.2 | i. | 4 parts | -4 marks | 4 |
| | ii. | Agile methods | -2 marks | 6 |
| | | Principles | -4 marks | |

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| OR | iii. | At least 6 differences | -6 marks | 6 |
| Q.3 | Attempt any two: | | | |
| | i. | Lean approach | -2 marks | 5 |
| | | How it works | -3 marks | |
| | ii. | roles in Agile process | -3 marks | 5 |
| | | difference | -2 marks | |
| | iii. | Scrum applications | -2 marks | 5 |
| | | Explanation | -3 marks | |
| Q.4 | i. | write a product vision in scrum | -3 marks | 3 |
| | ii. | working principle of Agile | -4 marks | 7 |
| | | Values provided | -3 marks | |
| | OR | iii. | purpose of sprint retrospective | 7 |
| | | sprint planning. | -3 marks | |
| Q.5 | i. | 4 metrics | -4 marks | 4 |
| | ii. | agile project management tools | -3 marks | 6 |
| | | roles | -3 marks | |
| OR | iii. | Risk management description | -6 marks | 6 |
| Q.6 | Attempt any two: | | | |
| | i. | Reason not use agile | -2 marks | 5 |
| | | Challenges | -3 marks | |
| | ii. | Essential qualities | -5 marks | 5 |
| | iii. | At least two tools | -5 marks | 5 |
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