

## CONTINUOUS ASSESSMENT TEST 1

(Regulations 2022)

Month and Year : September 2024	Roll Number: 22 CSR 257
Programme : B.E	Date : 02.09.2024
Branch : CSE	Time : 2.30 pm to 4.00 pm
Semester : V	
Course Code : 22CSC51	Duration : 1 ½ Hours
Course Name : Agile Methodologies	Max. Marks : 50

PART - A ( $10 \times 2 = 20$  Marks)  
ANSWER ALL THE QUESTIONS

1. Identify the collections of a process that need to be performed when some work products are to be created. [CO1] [K2]
2. Outline the umbrella activities that occur throughout the software process. [CO1] [K2]
3. Infer the various requirement engineering task. [CO1] [K2]
4. List two examples of software projects that would be amenable to the prototyping model on your perspective. Be specific. [CO1] [K3]
5. Draw a use case model for activities involved in ordering food in a restaurant from the point when the customer enters into the restaurant to the point when he leaves the restaurant. [CO1] [K3]
6. Prepare the Class-responsibility-collaborator (CRC) card for Bank account class [CO1] [K3]
7. Represent Agile Task Board with its elements diagrammatically. [CO2] [K2]
8. Interpret the project manager's practices in agile project development. [CO2] [K2]
9. Predict some common values of agile manifesto that can lead to an effective team. [CO2] [K3]
10. Outline the most popular methodologies that are followed in agile development. [CO2] [K2]

Part - B ( $3 \times 10 = 30$  Marks)  
ANSWER ANY THREE QUESTIONS

11. Draw the block diagram of a generic process framework and explain its activities. (10) [CO1] [K2]
12. (i) Compare traditional waterfall model with spiral model. (5) [CO1] [K2]  
(ii) With a neat sketch, explain in detail about requirement elicitation and analysis. (5) [CO1] [K2]
13. Build the use case model and class diagram for Bank ATM system. (10) [CO1] [K3]
14. Summarize the 12 principles of agile software. (10) [CO2] [K2]

Bloom's Taxonomy Level	Remembering (K1)	Understanding (K2)	Applying (K3)	Analysing (K4)	Evaluating (K5)	Creating (K6)
Percentage	--	70	30	--	--	--

## CONTINUOUS ASSESSMENT TEST 2

(Regulations 2022)

Month and Year : October 2024	Roll Number: 22CSE237
Programme : B.E	Date : 16.10.2024
Branch : CSE	Time : 9.15 am to 10.45 am
Semester : V	
Course Code : 22CSC51	Duration : 1 ½ Hours
Course Name : Agile Methodologies	Max. Marks : 50

PART - A ( $10 \times 2 = 20$  Marks)  
ANSWER ALL THE QUESTIONS

1. Indicate the check list that a good user story should fulfil. [CO2] [K2]
2. Write a user story for the e-commerce application from the customer's perspective. [CO2] [K3]
3. Consider a scrum team has completed 100 story points over 4 sprints. Calculate the actual velocity. [CO2] [K3]
4. Predict the extreme programming (XP) values. [CO3] [K2]
5. Interpret the tools to carryout lean. [CO3] [K2]
6. Compare the three wastes of pull system. [CO3] [K2]
7. How does kanban framework manages work flow? [CO3] [K2]
8. Infer the advantages and disadvantages of extreme programming. [CO3] [K2]
9. Differentiate kanban and scrum. [CO3] [K2]
10. Outline the components of a kanban board. [CO3] [K2]

Part - B ( $3 \times 10 = 30$  Marks)  
ANSWER ANY THREE QUESTIONS

11. Illustrate the scrum process with a neat sketch. (10) [CO2] [K2]
12. Imagine you are managing a software development using scrum. Your team is working in 2-week sprints. Initially, you need to complete 50 story points. By the end of first week, only 15 story points have been completed. 20 new story points were added newly in the 4<sup>th</sup> day of first week. Draw burndown charts to indicate low-risk, high-risk and no risk to be followed further. (10) [CO2] [K3]
13. Explain the extreme programming (XP) practices in detail. (10) [CO3] [K2]
14. Outline the seven values and seven wastes of the lean. (10) [CO3] [K2]

Bloom's Taxonomy Level	Remembering (K1)	Understanding (K2)	Applying (K3)	Analysing (K4)	Evaluating (K5)	Creating (K6)
Percentage	-	77	23	-	-	-

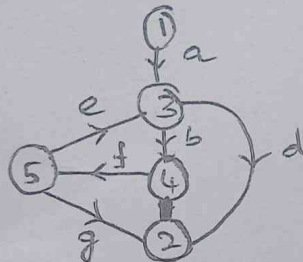


KONGU ENGINEERING COLLEGE, PERUNDURAI 638 060  
CONTINUOUS ASSESSMENT TEST 3  
(Regulations 2022)

Month and Year : November 2024	Roll Number: <u>22CSR237</u>
Programme : B.E Branch : CSE Semester : V	Date : 22.11.2024 Time : 9.15 am to 10.45 am
Course Code : 22CSC51 Course Name : Agile Methodologies	Duration : 1 ½ Hours Max. Marks : 50

PART - A ( $10 \times 2 = 20$  Marks)  
ANSWER ALL THE QUESTIONS

1. Interpret the need for system testing. [CO4] [K2]
2. Distinguish between alpha and beta testing. [CO4] [K2]
3. Sketch the graph matrices for the given flow graph. [CO4] [K2]



4. Consider a system that accepts ages from 18 to 56. List out all the valid test cases based on boundary value analysis. [CO4] [K3]
5. Compare validation and verification. [CO4] [K2]
6. Outline the characteristics of an effective project manager. [CO5] [K2]
7. Consider a mobile application development project. During rigorous testing, the QA team identifies 120 defects. However, after the app is launched, user report an additional 30 defects. Calculate defect removal efficiency. [CO5] [K3]
8. Distinguish between FP and LOC measures. [CO5] [K2]
9. Can a small company initiate SPI activities and do it successfully? Justify your answer. [CO5] [K3]
10. "The overall goal of project planning is to establish a pragmatic strategy for controlling, tracking and monitoring a complete technical project". Give reason. [CO5] [K2]

Part - B ( $3 \times 10 = 30$  Marks)  
ANSWER ANY THREE QUESTIONS

11. Discuss in detail about black box testing and its types with suitable (10) examples. [CO4] [K2]
12. Consider a program that finds the sum and average of odd and even numbers separately in a set of N numbers. Draw the flow graph and find cyclomatic complexity. Also, write test cases for every independent path. (10) [CO4] [K2]
13. Discuss in detail about function point with examples. (10) [CO5] [K2]

14. For the following projects calculate the schedule variance (SV), cost variance (10) [CO5] [K3] (CV), schedule performance index (SPI) and cost performance index (CPI) at the end of second month and identify whether the
- Project is on schedule
  - Project is on budget.

Year	Planned Value	Earned Value	Actual Cost
1	11,00,000	10,00,000	12,50,000
2	6,00,000	7,50,000	5,00,000
3	25,00,000	-	-
4	8,00,000	-	-

Bloom's Taxonomy Level	Remembering (K1)	Understanding (K2)	Applying (K3)	Analysing (K4)	Evaluating (K5)	Creating (K6)
Percentage	-	73	27	-	-	-