Change Theme : No

Help Button : No

Show Reports : No

Show Progress Bar : No

Group I

Group Number : 1

Group Id : 64065314257

Group Maximum Duration : 0

Group Minimum Duration : 90

Show Attended Group? : No

Edit Attended Group? : No

Break time : 0

Group Marks : 795

Is this Group for Examiner? : No

Examiner permission : Cant View

Show Progress Bar? : No

Revisit allowed for group Instructions? : Yes

Maximum Instruction Time : 0

Minimum Instruction Time : 0

Group Time In : Minutes

Navigate To Group Summary From Last Question? : No

Disable Submit Button During Assessment? : No

Section Selection Time? : 0

No of Optional sections to be attempted : 0

SW Engg

Section Id :	64065341439
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	25
Number of Questions to be attempted :	25
Section Marks :	50
Display Number Panel :	Yes
Section Negative Marks :	0
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065388976
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 640653614706 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT **"DEGREE LEVEL : SOFTWARE ENGINEERING (COMPUTER BASED EXAM)"**

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?

CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE <u>TOP</u> FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406532051987. ✔ YES

6406532051988. ✖ NO

Sub-Section Number :	2
Sub-Section Id :	64065388977
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 2 Question Id : 640653614707 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

Which of the following teams in a software organization is primarily responsible for creating prototypes for the software products after detail communication with the clients?

Options :

6406532051989. ✖ Sales team

6406532051990. ✔ Designers

6406532051991. ✖ Engineering managers

6406532051992. ✖ Data scientists

Question Number : 3 Question Id : 640653614708 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

Which of the deployment environments exactly resembles the production environment and is used for testing the web application for its performance before it goes live?

Options :

6406532051993. ✖ Development

6406532051994. ✖ Testing

6406532051995. ✔ Staging

6406532051996. ✖ Production

Question Number : 4 Question Id : 640653614712 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

Which of the following debugging strategies involves changing inputs and observing differences in output to identify issues in the code?

Options :

6406532052005. ✔ Input manipulation

6406532052006. ✖ Backwards debugging

6406532052007. ✖ Forwards debugging

6406532052008. ✖ Blackbox debugging

Question Number : 5 Question Id : 640653614717 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

Which of the following hosting options has no requirement to purchase the entire server hardware and therefore involves no maintenance overhead; however, it does not provide the software layer for hosting the web app?

Options :

6406532052025. �./✱ Bare Metal Servers

6406532052026. ✓ Infrastructure-as-a-service

6406532052027. ✱ Platform-as-a-service

6406532052028. ✱ None of these

Question Number : 6 Question Id : 640653614718 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

Which type of software testing is carried out before the initial system testing to check whether the basic functionalities are working with a few basic test cases?

Options :

6406532052029. ✱ Alpha testing

6406532052030. ✱ Beta testing

6406532052031. ✓ Smoke testing

6406532052032. ✱ Stress testing

Question Number : 7 Question Id : 640653614721 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

What is the main advantage of using paper prototyping?

Options :

6406532052041. ✱ It provides an actual functioning version of the software.

6406532052042. ✱ It allows for comprehensive testing of complex algorithms.

6406532052043. ✔ It facilitates early and inexpensive validation of user interface designs.

6406532052044. ✖ It automates the process of user feedback collection.

Question Number : 8 Question Id : 640653614724 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

What kind of debugging technique involves different tools to compare the logging data between different executions of the program under test?

Options :

6406532052053. ✖ Logging

6406532052054. ✔ Dump & diff

6406532052055. ✖ Stepping in debugger

6406532052056. ✖ Profiling tool

Sub-Section Number :	3
Sub-Section Id :	64065388978
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 9 Question Id : 640653614713 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

In a software project, the project management team has identified a potential risk of personnel shortfall with a probability (P) of 0.7 and an impact (I) of 2. Assess the risk associated with the project due to personnel shortfall.

Choose the correct option.

Options :

6406532052009. ✖ 3.5

6406532052010. ✖ 0.35

6406532052011. ✔ 1.4

6406532052012. ✖ 2.86

Question Number : 10 Question Id : 640653614716 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

An software organization wants to reuse the knowledge of one project, in another project, and it is possible if the knowledge is documented and archive properly. Which kind of tools can be used by the organization?

Options :

6406532052021. ✖ Project management tools

6406532052022. ✖ Development tools

6406532052023. ✔ Knowledge-sharing tools

6406532052024. ✖ None of these

Question Number : 11 Question Id : 640653614720 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Consider a messaging platform where users can directly exchange messages with each other without relying on a central server. Each user's device acts as both a sender and a receiver of

messages, and the communication is decentralized.

Determine the type of software architecture this messaging platform uses.

Options :

6406532052037. �֍ Client-server architecture

6406532052038. ✖ Event-driven architecture

6406532052039. ✖ Layered architecture

6406532052040. ✔ Peer-to-peer architecture

Question Number : 12 Question Id : 640653614727 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

In which of the scrum activities, the scrum team demonstrates what tasks they have completed so that those tasks can be removed from the *To-Do* list or *In-Progress* list to the *Done* list?

Options :

6406532052065. ✖ Sprint Planning

6406532052066. ✖ Daily Scrum Meeting

6406532052067. ✔ Sprint Review

6406532052068. ✖ Sprint Retrospective

Question Number : 13 Question Id : 640653614728 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

An organization came up with a mobile app for employees to report their day-to-day tasks to the

corresponding managers. However, the employees find the mobile app very difficult to use. They have to go thought the manual page first in order to properly utilize the app.

What kind of usability goal is missing from the mobile app?

Options :

6406532052069. � Efficiency

6406532052070. ✷ Safe to use

6406532052071. ✔ Learnability

6406532052072. ✷ Memorability

Question Number : 14 Question Id : 640653614729 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Suppose a mobile app has a feature using which a customer can pay any credit card bill. The customer has to provide only the credit card number as input. However, the mobile app prompt its customer to enter the credit card number twice to confirm that customer does not make a mistake while typing the number.

Which of the following heuristics of UI evaluation is fulfilled in this case?

Options :

6406532052073. ✷ Flexibility

6406532052074. ✔ Prevent error

6406532052075. ✷ Support error recovery

6406532052076. ✷ Provide help

Question Number : 15 Question Id : 640653614730 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Identify the type of requirement gathering technique that is most suitable when it's necessary to reach some consensus about the requirements and also to point out any areas of disagreement.

Options :

6406532052077. ✸ Questionnaires

6406532052078. ✸ Interviews

6406532052079. ✔ Focus group

6406532052080. ✸ Documentations

Sub-Section Number :	4
Sub-Section Id :	64065388979
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 16 Question Id : 640653614714 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

An e-commerce company is preparing to launch a major update to its mobile app. To ensure a smooth transition, they have set up a separate environment with the new version of the app. This environment will undergo thorough testing and validation before directing a portion of the user traffic to the new version.

Once the testing is successful, slowly roll out the change to a small subset of users.

Which software deployment strategy is being implemented in this scenario?

Options :

6406532052013.

✔ Canary deployment

6406532052014. ✖ Red/Black deployment

6406532052015. ✖ Incremental deployment

6406532052016. ✖ None of these

Question Number : 17 Question Id : 640653614722 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the following code base in Python.

```python
if income < 0:
    print("invalid input")
elif income >= 0 and income <= 150000:
    print("non-eligible")
else:
    print("eligible")
```

Identify the set of valid test cases for black box testing using the equivalence class technique.

Options :

6406532052045. ✖ {income = 0, income = 150000}

6406532052046. ✖ {income = -100, income = 0, income = 150000}

6406532052047. ✔ {income = -100, income = 100000, income = 250000}

6406532052048. ✖ {income = 0, income = 100000, income = 150000, income = 250000}

Question Number : 18 Question Id : 640653614725 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Suppose an online bookshop application has two modules: *Customer* and *Product*. *Customer* module has functions focusing only on all customer-related tasks, like customer registration, customer profile update, etc., while the *Product* module has functions focusing only on the tasks related to the products, like adding a new product, updating product information, removing a product, etc. Furthermore, the two classes *Customer* and *Product* need minimum interaction since they share very small amounts of data.

Identify the type of coupling and cohesion for modules *Customer* and *Product*.

Options :

6406532052057. ✷ Low cohesion and low coupling

6406532052058. ✷ Low cohesion and high coupling

6406532052059. ✔ High cohesion and low coupling

6406532052060. ✷ High cohesion and high coupling

Question Number : 19 Question Id : 640653614731 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

An organization has planned to develop a web application in which a user can upload any English text. The web application applies paraphrasing and some other techniques to convert it into a kind of English text that can be understood by anyone with knowledge of elementary English.

The entire task of the web application is divided into different modules, and interactions between different modules are outlined.

In which phase of the SDLC process is the web application currently in?

Options :

6406532052081. ✶ Requirement gathering

6406532052082. ✶ Development phase

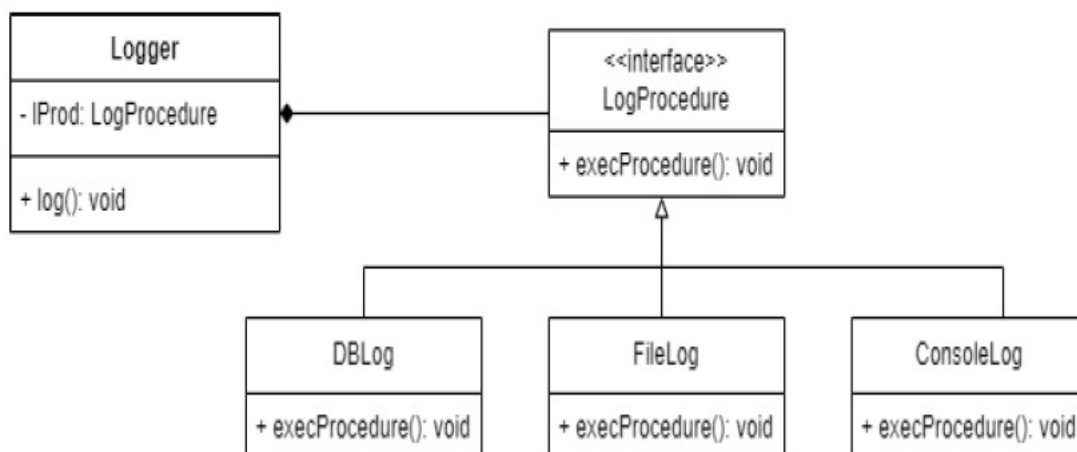6406532052083. ✔ Design phase

6406532052084. ✶ Testing phase

6406532052085. ✶ Maintenance phase

Question Number : 20 Question Id : 640653614732 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider class *Logger* can be used by other classes to log different events. The *Logger* class can follows one of the three procedures of logging events: (1) It can log the event to a file; (2) It can log the event to a database; or (3) It can log the event to a console. The designer has applied a specific design pattern, and came up with a class diagram as shown below.

Which of the following design pattern is applied?

Options :

6406532052086. ✶ Adapter design pattern

6406532052087. ✶ Iterator design pattern

6406532052088. ✶ Observer design pattern

6406532052089.

✅ Strategy design pattern

Sub-Section Number :   5

Sub-Section Id :   64065388980

Question Shuffling Allowed :   No

Is Section Default? :   null

Question Id : 640653614709 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (21 to 22)

Question Label : Comprehension

Consider an organization developing a portal for a school. The developer team has developed some features that were not specified by the client, and developing these
extra features has cost the organization extra budget and time.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 21 Question Id : 640653614710 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

What kind of risk is it?

Options :

6406532051997. ✳ Technical risk

6406532051998. ✳ Project risk

6406532051999. ✅ Business risk

6406532052000. ✳ None of these

Question Number : 22 Question Id : 640653614711 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

How this risk can be mitigated?

Options :

6406532052001. ✖ By building prototypes and communicating with clients

6406532052002. ✖ By hiring developers with relevant experience, within the company, outside the company

6406532052003. ✖ By providing training to multiple people with the skills required to work on the project

6406532052004. ✔ By performing appropriate cost-benefit analysis and communicating with clients

Sub-Section Number :	6
Sub-Section Id :	64065388981
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 23 Question Id : 640653614719 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

Which of the integration testing approaches do/does not require the use of stubs and drivers?

Options :

6406532052033. ✔ Big bang approach

6406532052034. ✖ Bottom up approach

6406532052035. ✖ Top down approach

6406532052036. ✖ Mixed approach

Sub-Section Number :   7

Sub-Section Id :   64065388982

Question Shuffling Allowed :   Yes

Is Section Default? :   null

Question Number : 24 Question Id : 640653614715 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Which of the following is/are the benefits of continuous integration?

Options :

6406532052017. ✔ Reduces deployment time

6406532052018. ✖ Initially, less effort is required to set up processes users

6406532052019. ✔ Users can see an initial prototype

6406532052020. ✔ It pushes the developers to create modular code

Question Number : 25 Question Id : 640653614723 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider the following code base in Python.

```
if len(passcode) < 3 or len(passcode) > 8:
    print("invalid passcode")
else:
    if(len(passcode) > 5):
        print("strong passcode")
    else:
        print("weak passcode")
```

Identify the set/sets of valid test cases for branch coverage.

Options :

6406532052049. ✱ {passcode = "25", passcode = "2341234568"}

6406532052050. ✱ {passcode = "25", passcode = "123425", passcode = "2341234568"}

6406532052051. ✔ {passcode = "25", passcode = "123425", passcode = "2341"}

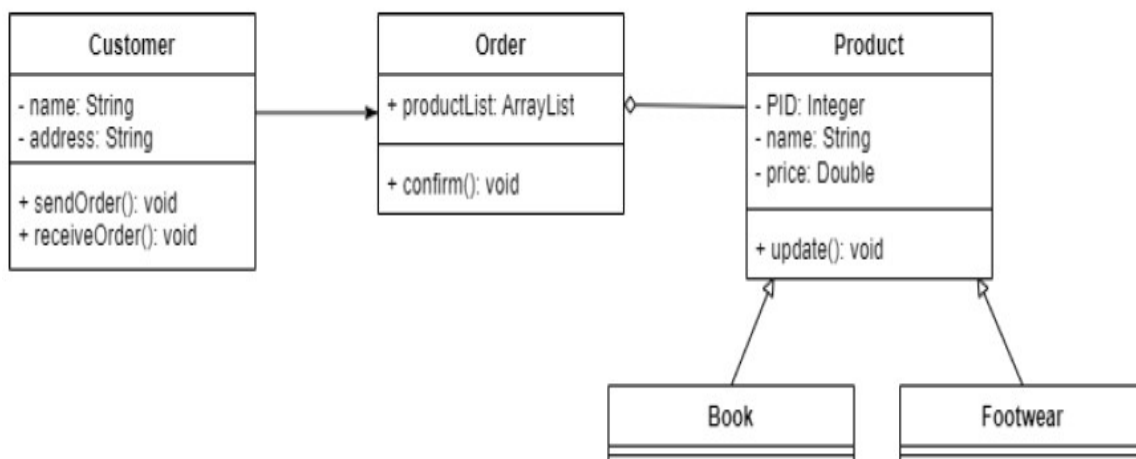6406532052052. ✔ {passcode = "25", passcode = "123425", passcode = "2341", passcode = "2341234568"}

Question Number : 26 Question Id : 640653614726 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider the class diagram given below.

Which of the following is/are true about the class diagram?