

<b>Change Theme :</b>	No
<b>Help Button :</b>	No
<b>Show Reports :</b>	No
<b>Show Progress Bar :</b>	No

**Group I**

<b>Group Number :</b>	1
<b>Group Id :</b>	64065314255
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	90
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	795
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No
<b>Revisit allowed for group Instructions? :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Minimum Instruction Time :</b>	0
<b>Group Time In :</b>	Minutes
<b>Navigate To Group Summary From Last Question? :</b>	No
<b>Disable Submit Button During Assessment? :</b>	No
<b>Section Selection Time? :</b>	0
<b>No of Optional sections to be attempted :</b>	0

<b>Section Id :</b>	64065341409
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	25
<b>Number of Questions to be attempted :</b>	25
<b>Section Marks :</b>	50
<b>Display Number Panel :</b>	Yes
<b>Section Negative Marks :</b>	0
<b>Group All Questions :</b>	No
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	64065388786
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Number : 1 Question Id : 640653613966 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 TOP FOR THE SUBJECTS REGISTERED BY YOU)**

**Options :**

6406532049669. ✔ YES

6406532049670. ✖ NO

Sub-Section Number :	2
Sub-Section Id :	64065388787
Question Shuffling Allowed :	Yes
Is Section Default? :	null

**Question Number : 2 Question Id : 640653613967 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 laying down the terms of service for its software products?

**Options :**

6406532049671. ✖ Sales team

6406532049672. ✖ Support team

6406532049673. ✔ Ethics and policy specialists

6406532049674. ✖ Data scientists

**Question Number : 3 Question Id : 640653613968 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

IDEs are very useful in the software development process, mainly because\_\_\_\_\_.

**Options :**

6406532049675. ✖ they are useful in documenting and archiving knowledge of one project so that it can be reused in another project

6406532049676. ✖ they are useful for sharing documents and archiving decisions

6406532049677. ✖ they enable all the members of the team to get a big picture as well as a detailed view of progress in the software development

6406532049678. ✔ they help the developers become more productive

**Question Number : 4 Question Id : 640653613969 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 hosting options requires the purchase of the entire server hardware?

**Options :**

6406532049679. ✔ Bare Metal Servers

6406532049680. ✖ Infrastructure-as-a-service

6406532049681. ✖ Platform-as-a-service

6406532049682. ✖ None of these

**Question Number : 5 Question Id : 640653613977 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 performance enhancement strategies of the web applications suggests compressing the static pages using tools like Brotli and Gzip?

**Options :**

6406532049711. ✖ Caching

6406532049712. ✔ Quick loading and rendering

6406532049713. ✖ Task queues

6406532049714. ✖ Monitoring

**Question Number : 6 Question Id : 640653613978 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 provides the developers with tools like the IDE and others to build, run, and test code?

**Options :**

6406532049715. ✔ Development environment

6406532049716. ✖ Testing environment

6406532049717. ✖ Staging environment

6406532049718. ✖ Production environment

**Question Number : 7 Question Id : 640653613984 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

Suppose a project consists of some modules, and all of them share a common global data structure. What kind of coupling exists between these modules?

**Options :**

6406532049735. ✖ Data coupling

6406532049736. ✖ Control coupling

6406532049737. ✔ Common coupling

6406532049738. ✖ Content coupling

**Question Number : 8 Question Id : 640653613987 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

GIT is a \_\_\_\_\_.

Identify the appropriate option to fill in the blank.

**Options :**

6406532049747. ✖ Compiler

6406532049748. ✖ Integrated development environment

6406532049749. ✔ Version control system

6406532049750. ✖ Web application framework

**Question Number : 9 Question Id : 640653613990 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 is a type of performance testing?

**Options :**

6406532049759. ✖ Alpha testing

6406532049760. ✖ Beta testing

6406532049761. ✖ Smoke testing

6406532049762. ✔ Stress testing

Sub-Section Number :	3
Sub-Section Id :	64065388788
Question Shuffling Allowed :	Yes
Is Section Default? :	null

**Question Number : 10 Question Id : 640653613970 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 music production software is designed to help musicians create high-quality tracks. The software takes in audio recordings and applies a series of modules to refine and enhance the sound. Each module focuses on different aspects such as equalization, compression, and reverb. The output of each module is connected to the input of the next, ultimately resulting in a polished audio track.

What type of software architecture is most likely used for the music production software?

**Options :**

6406532049683. ✖ Client-server system

6406532049684. ✔ Pipe and filter

6406532049685. ✖ Model view controller

6406532049686. ✖ Peer-to-peer architecture

**Question Number : 11 Question Id : 640653613971 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

During debugging, when a developer refers to documentation and code examples to understand the proper usage of an API or library without looking at the internal code implementation, which debugging strategy is being used?

**Options :**

6406532049687. ✖ Backwards debugging

6406532049688. ✔ Blackbox debugging

6406532049689. ✖ Forwards debugging

6406532049690. ✖ Input manipulation debugging

**Question Number : 12 Question Id : 640653613989 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

A language learning app offers users the option to quickly access their most frequently practiced lessons without navigating through multiple menus. It also provides a feature to mark lessons as favorites, along with tracking the user's progress and performance. Which of the following Usability Goals is **NOT** being focussed on in the above mentioned features for the language learning app?

**Options :**

6406532049755. ✖ Efficiency

6406532049756. ✔ Safe to use

6406532049757. ✖ Learnability

6406532049758. ✖ Memorability

**Sub-Section Number :**

4

**Sub-Section Id :**

64065388789

**Question Shuffling Allowed :**

Yes



Is Section Default? :

null

Question Number : 13 Question Id : 640653613972 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 the risk assessed for schedule slippage is 1.6. The impact of the risk due to schedule slippage is 2. What is the probability of schedule slippage occurring during project development?

Options :

6406532049691. ✖ 0.4

6406532049692. ✖ 0.32

6406532049693. ✔ 0.8

6406532049694. ✖ 0.25

Question Number : 14 Question Id : 640653613974 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

Match the following requirement gathering techniques with what they are good for.

Techniques	Good for
1. Interviews	A. Good for collecting multiple viewpoints
2. Focus groups	B. Good for exploring issues
3. Naturalistic observations	C. Good for Procedures, regulations and standards
4. Documentation	D. Good for understanding context

Options :

6406532049699. ✔ 1- B, 2- A, 3-D, 4- C

6406532049700. ✖ 1- B, 2- A, 3-C, 4- D

6406532049701. ✖ 1- A, 2- B, 3-D, 4- C

6406532049702. ✖ 1- A, 2- B, 3-C, 4- D

**Question Number : 15 Question Id : 640653613975 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 two requirements:

**Requirement 1:** The website must support a maximum of 100 registration requests per second.

**Requirement 2:** The website must provide a registration page that allows the customers to register themselves on the website to avail of the rest of the services offered.

Which of the following statement is true?

**Options :**

6406532049703. ✖ Requirement 1 is a functional requirement, whereas Requirement 2 is a non-functional requirement.

6406532049704. ✔ Requirement 2 is a functional requirement, whereas Requirement 1 is a non-functional requirement.

6406532049705. ✖ Both requirements are functional requirements

6406532049706. ✖ Both requirements are non-functional requirements.

**Question Number : 16 Question Id : 640653613985 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 in a web application there is a class called *Logger* that has a method *log(e: Event)* to log different types of events in a log file. The other classes in the web application are associated with the *Logger* class to log various events.

Later, the development team realized that some of the special kinds of events had to be logged into the database. Instead of modifying the existing *Logger* class, the *Logger* class is extended (inherited) to another class *DBLogger* and added the new method *dbLog(e: Event)* to log the events to the database.

In the above scenario, which of the SOLID principles is satisfied?

**Options :**

6406532049739. ✖ Single Responsibility Principle

6406532049740. ✔ Open-Closed Principle

6406532049741. ✖ Interface Segregation Principle

6406532049742. ✖ Dependency Inversion Principle

**Question Number : 17 Question Id : 640653613986 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 a programming framework has been proposed that has a wide range of data structures. The designer of the framework wants that the clients will be able to access the elements of the data structure as per the specific rules of the given data structure; however, the clients may not know how the elements are stored in the data structures. Therefore, the behavior "how the elements are accessed" is separated into a different class, which can be used with any data structure within the framework, and it enables accessing the elements of any data structure in the same manner. Which design pattern is followed in the designing process?

**Options :**

6406532049743. ✖ Adapter design pattern

6406532049744. ✖ Observer design pattern

6406532049745. ✖ Facade design pattern

6406532049746. ✔ Iterator design pattern

**Question Number : 18 Question Id : 640653613988 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

A software organization is planning to build an AI-based application to predict the chances of a candidate's success in a particular recruitment drive. The organization wants to estimate the time and effort it will take to complete the project. To achieve an accurate estimation, they assembled a group of experienced project managers and developers. Each individual is given a detailed project plan and a form to record their time estimates. These estimates are then collected, compiled, and averaged by a designated coordinator. The process is repeated multiple times to refine the time estimation.

What estimation technique is being utilized in this scenario?

**Options :**

6406532049751. ✖ Expert judgment

6406532049752. ✔ Delphi technique

6406532049753. ✖ COCOMO model

6406532049754. ✖ All of these

**Question Number : 19 Question Id : 640653613991 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

A organization wants to deploy a new version of a web application. In order to do that they have created a new production environment for the new version of the web application without affecting the present one, and after sufficient testing of the new version, the users are routed

from the current environment to the new environment.

Which of the software deployment strategies is followed in this case?

**Options :**

6406532049763. ✓ Blue/Green deployment

6406532049764. ✗ Canary deployment

6406532049765. ✗ Versioned deployment

6406532049766. ✗ None of these

**Question Number : 20 Question Id : 640653613992 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 user story.

```
Feature 2: Invite team members  
As a project manager,  
I want to invite other members of my team to this project management platform  
so that I can continuously track if the project progress is as per the schedule
```

Which is refined as follows:

```
Feature 2: Invite team members  
As a project manager,  
I want to invite other members of my team using their email id or mobile number to  
this project management platform  
so that I can continuously track if the project progress is as per the schedule
```

This refinement makes the user story \_\_\_\_\_.

**Options :**

6406532049767. ✔ Specific

6406532049768. ✖ Measurable

6406532049769. ✖ Achievable

6406532049770. ✖ Relevant

Sub-Section Number :	5
Sub-Section Id :	64065388790
Question Shuffling Allowed :	Yes
Is Section Default? :	null

**Question Number : 21 Question Id : 640653613976 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 following statements about the waterfall model is/are correct?

**Options :**

6406532049707. ✔ All the phases of the software engineering process take place in sequential order.

6406532049708. ✖ It is an incremental model.

6406532049709. ✖ It is easy and cost-effective to accommodate the changes in the software if the client does not like some features.

6406532049710. ✖ Most of the phases of the software engineering process can be carried out simultaneously

**Question Number : 22 Question Id : 640653613982 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 following integration testing approaches may require drivers?

**Options :**

6406532049727. ✖ Big bang approach

6406532049728. ✔ Bottom up approach

6406532049729. ✖ Top down approach

6406532049730. ✔ Mixed approach

**Sub-Section Number :** 6

**Sub-Section Id :** 64065388791

**Question Shuffling Allowed :** Yes

**Is Section Default? :** null

**Question Number : 23 Question Id : 640653613973 Question Type : MSQ Is Question**

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

**Correct Marks : 2 Max. Selectable Options : 0**

Question Label : Multiple Select Question

A financial budgeting application allows users to input their monthly expenses and income. The app automatically calculates the user's total savings at the end of each month and provides visual cues for overspending in different expense categories. It also prevents users from inputting negative values or leaving essential fields blank. Which of the following heuristics of UI evaluation does the financial budgeting app adhere to?

**Options :**

6406532049695. ✔ Show status

6406532049696. ✖ Support error recovery

6406532049697. ✔ Prevent errors

6406532049698. ✖ Provide help

**Question Number : 24 Question Id : 640653613983 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2 Max. Selectable Options : 0**

Question Label : Multiple Select Question

*A car is a vehicle, and a car has an engine.*

Suppose we are modeling the information in the above statement into a class diagram, and car, vehicle, and engine are the three classes. Identify the correct relationships from the given options.

**Options :**

6406532049731. ✔ car has an inheritance relationship with vehicle

6406532049732. ✖ car has an composition relationship with vehicle

6406532049733. ✖ engine has an inheritance relationship with car

6406532049734. ✔ engine has an composition relationship with car

<b>Sub-Section Number :</b>	7
<b>Sub-Section Id :</b>	64065388792
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Id : 640653613979 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 : (25 to 26)**

Question Label : Comprehension



Consider the following code segment:

```
if age >= 18 and age <= 60:  
    print("eligible")  
else:  
    print("not eligible")
```

Based on the above code, answer the given subquestions.

### Sub questions

**Question Number : 25 Question Id : 640653613980 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 sets of test cases provide/s branch coverage of the given code segment?

**Options :**

6406532049719. ✖ {18, 60}

6406532049720. ✔ {30, 75}

6406532049721. ✖ {10, 75}

6406532049722. ✔ {10, 30, 75}

**Question Number : 26 Question Id : 640653613981 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 sets of test cases provide/s multiple condition coverage of the given code segment?

**Options :**

6406532049723. ✖ {18, 60}

6406532049724. ✖ {30, 75}

6406532049725. ✖ {10, 30}

6406532049726. ✔ {10, 30, 75}

## Sw Testing

Section Id :	64065341410
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	17
Number of Questions to be attempted :	17
Section Marks :	100
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 :	64065388793
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 27 Question Id : 640653613993 Question Type : MCQ Is Question

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