

Question Shuffling Allowed :Yes

Is Section Default? :null

Question Number : 135Question Id : 640653455688Question Type : MCQIs Question Mandatory : NoCalculator : NoneResponse Time : N.AThink Time : N.AMinimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Select the correct segment of a supply chain from Column B for the movement types in Column A. Note that one-to-one mapping in the table is not necessary.

Column A	Column B
a.1 From Warehouse to Store	b.1 First mile
a.2 From Distribution centre to Warehouse	b.2 Middle mile
a.3 Stores to Customers	b.3 Last mile

Options :

- 6406531515217.✔a.1: b.2, a.2:b.2, a.3:b.3
- 6406531515218.✖a.1: b.1, a.2:b.2, a.3:b.3
- 6406531515219.✖a.1: b.3, a.2:b.1, a.3:b.3
- 6406531515220.✖None of these

Sw Engg

Section Id :64065329450

Section Number :6

Section type :Online

Mandatory or Optional :Mandatory

Number of Questions :25

Number of Questions to be attempted :25

Section Marks :100

Display Number Panel :	Yes
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 :	64065365960
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 136 Question Id : 640653455711 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"

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?
CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECT TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT ,PLS CHECK THE SECTION AT THE [TOP](#) FOR THE SUBJECTS REGISTERED BY YOU)

- Options :
- 6406531515261.  Yes
 - 6406531515262.  No

Sub-Section Number :	2
Sub-Section Id :	64065365961
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 137 Question Id : 640653455712 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Match the following.

Role	Responsibility
1. Data scientists	A. Talk to users, create prototypes
2. Marketing Team	B. Help in resolving client issues
3. Designers	C. Conduct market research, identify audiences
4. Support Team	D. Analyse the data generated by different teams and users

Options :

6406531515263. ✖ 1-C, 2-D, 3-B, 4-A

6406531515264. ✖ 1-C, 2-D, 3-A, 4-B

6406531515265. ✔ 1-D, 2-C, 3-A, 4-B

6406531515266. ✖ 1-D, 2-A, 3-B, 4-C

Question Number : 138 Question Id : 640653455714 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Match the following regarding deployment environments.

Deployment environment	Key activity
1. Development	A. Live environment where real users interact with the system
2. Testing	B. Provides the local environment of a developer
3. Staging	C. Integration and system testing are performed
4. Production	D. Exactly resembles the production environment to conduct various performance and stress testing

Options :

6406531515271. ✖ 1-B, 2-C, 3-A, 4-D

6406531515272. ✔ 1-B, 2-C, 3-D, 4-A

6406531515273. ✖ 1-A, 2-C, 3-D, 4-B

6406531515274. ✖ 1-A, 2-C, 3-B, 4-D

Question Number : 139 Question Id : 640653455715 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Which software deployment strategies keep all the versions of the software alive and allow the users to choose a version?

Options :

6406531515275. ✖ Blue/Green deployment

6406531515276. ✖ Canary deployment

6406531515277. ✔ Versioned deployment

6406531515278. ✖ None of these

Question Number : 140 Question Id : 640653455716 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

The extent to which different modules are dependent upon each other is called

Options :

6406531515279. ✓ Coupling

6406531515280. ✗ Cohesion

6406531515281. ✗ Modularity

6406531515282. ✗ Stability

Question Number : 141 Question Id : 640653455720 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Consider testing a module that takes annual income as input. If the income is < 0 then it prints "invalid input". If the input is valid and it is $\leq 2,00,000$ then it prints "non-taxable income" else prints "taxable income".

Identify the number of equivalent classes for black box testing.

Options :

6406531515291. ✗ 2

6406531515292. ✓ 3

6406531515293. ✗ 4

6406531515294. ✗ 5

Question Number : 142 Question Id : 640653455721 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Consider a crypto trading system, that allows its users to buy or sell cryptocurrencies directly with others without the presence of a centralized exchange. The system is run by the computation

power and storage capabilities of all or some of the nodes present in the network.

Identify the type of software architecture used for the crypto trading system.

Options :

6406531515295. ✖ Client-server system

6406531515296. ✖ Pipe and filter

6406531515297. ✖ Model view controller

6406531515298. ✔ Peer-to-peer architecture

Question Number : 143 Question Id : 640653455722 Question Type : MCQ Is Question

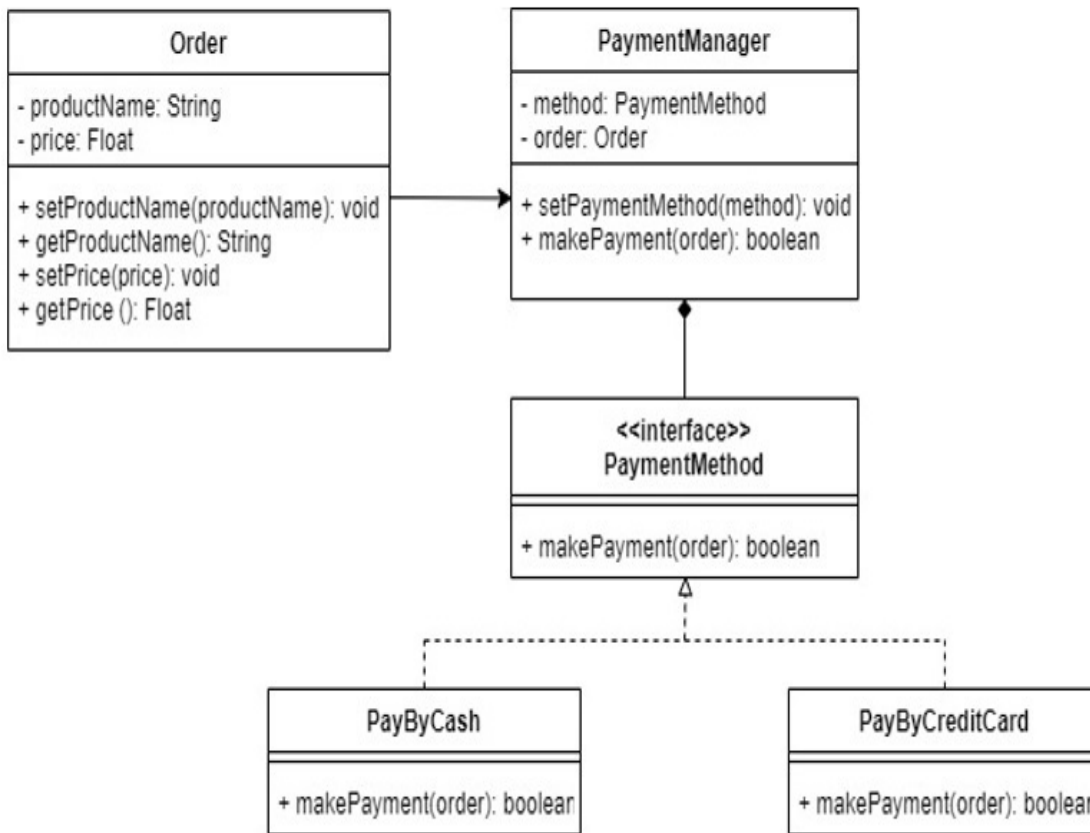
Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Consider a scenario where we use a class *PaymentManager* to make payment for one or more objects of the class *Order*. Class *PaymentManager* can make the payment using either cash or a credit card. However, in future, more payment methods can be added without violating the open-close principle.

We apply a design pattern **X**, and the designed class diagram is given as follows:



Identify the design pattern referred to as **X**.

Options :

- 6406531515299. ✖ Iterator design pattern
- 6406531515300. ✖ Adapter design pattern
- 6406531515301. ✔ Strategy design pattern
- 6406531515302. ✖ Facade design pattern

Question Number : 144 Question Id : 640653455723 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Consider that a company has developed a web application to sell various computer components. Customers can select the components and place the order by making payment, after order confirmation the ordered components will be packed and delivered to the customer locations. The web application has the feature to track the order from start to delivery.

The design of the web application includes an interface `DeliveryProcessing` that is associated with `Product` class (`Product` class objects are the computer components). The interface `DeliveryProcessing` has abstract methods: `placeOrder()`, `packageOrder()`, `deliverOrder()`, etc. The development team implements the interface `DeliveryProcessing` and defines the methods for processing the delivery. However, now the company also decided to sell software licenses, which can be delivered via email, and that do not require physical delivery. Therefore, some of the methods like `packageOrder()` of the `DeliveryProcessing` interface are not relevant for implementing the delivery process of the software licences.

Which of the SOLID principles is violated in the design?

Options :

- 6406531515303. ✖ Single responsibility principle
- 6406531515304. ✖ Open-close principle
- 6406531515305. ✖ Liskov substitution principle
- 6406531515306. ✔ Interface segregation principle
- 6406531515307. ✖ Dependency inversion principle

Question Number : 145 Question Id : 640653455724 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Which of the following is true about the `dump` and `diff` debugging technique?

Options :

- 6406531515308. ✖ Inserting print statements at the strategic locations and examining the output to identify where the error in the code
- 6406531515309. ✔ Using a tool to find differences between outputs and compare between the correct execution and incorrect execution
- 6406531515310. ✖ Use the stepping function of the debugger to identify the error
- 6406531515311. ✖ Use tools to get statistics about how often or how long various parts of the

program are executed

Question Number : 146 Question Id : 640653455725 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

In a given software, which of the following represents high cohesion and high coupling?

Options :

6406531515312. ✖ The functions in each module perform various functions, and a lot of data is interchanged or shared between the modules.

6406531515313. ✔ The functions in each module perform a specific function, and a lot of data is interchanged or shared between the modules.

6406531515314. ✖ The functions in each module are performing various functions, and no or very little data is interchanged or shared between the modules.

6406531515315. ✖ The functions in each module are performing specific functions, and no or very little data is interchanged or shared between the modules.

Question Number : 147 Question Id : 640653455726 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

In which type of cohesion, do all the functions of a module refer to or update the same data structure?

Options :

6406531515316. ✖ Sequential cohesion

6406531515317. ✔ Communicational cohesion

6406531515318. ✖ Procedural cohesion

6406531515319. ✖ Coincidental cohesion

Question Number : 148 Question Id : 640653455727 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Consider the design of a music player application where each `playlist` object consists of various `Music` objects.

Identify the relationship between the `playlist` class and the `Music` class.

Options :

6406531515320. ✖ Association

6406531515321. ✔ Composition

6406531515322. ✖ Inheritance

6406531515323. ✖ Dependency

Question Number : 149 Question Id : 640653455728 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Consider that the effort estimated for a project is 120 person-month. How many developers are required to complete the project in one year?

Options :

6406531515324. ✖ 12

6406531515325. ✔ 10

6406531515326. ✖ 100

6406531515327. ✖ 120

Question Number : 150 Question Id : 640653455729 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Which type of risk is caused by gold plating activities by the developers?

Options :

6406531515328. ✖ Project risk

6406531515329. ✔ Business risk

6406531515330. ✖ Technical risk

6406531515331. ✖ None of these

Question Number : 151 Question Id : 640653455730 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Consider the following risk table related to the risk assessment of a software project.

Risk	Probability	Impact
Personnel shortfall	50%	3
Insufficient domain knowledge	30%	3
Schedule slippage	60%	2
Shortcomings in external components	20%	4

Identify the option that orders the risk factors in descending order of the associated risk.

Options :

6406531515332. ✖ Shortcomings in external components, Personnel shortfall, Insufficient domain knowledge, Schedule slippage

6406531515333. ✖ Schedule slippage, Personnel shortfall, Insufficient domain knowledge, Shortcomings in external components

6406531515334. ✖ Shortcomings in external components, Insufficient domain knowledge, Schedule slippage, Personnel shortfall

6406531515335. ✔ Personnel shortfall, Schedule slippage, Insufficient domain knowledge, Shortcomings in external components

Question Number : 152 Question Id : 640653455731 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Match the following terms with their appropriate descriptions from the agile perspective.

Terms	Descriptions
1. Sprint	A. Daily meeting which involves - the development team, scrum owner, product manager
2. Product Backlog	B. The team member who ensures all activities are being done well
3. Standup	C. A short, time-boxed period when a scrum team works to complete a set amount of work
4. Scrum Master	D. Prioritized list of work for the development team that is derived from user stories and requirements

Options :

6406531515336. ✖ 1-B, 2-A, 3-D, 4-C

6406531515337. ✖ 1-B, 2-C, 3-D, 4-A

6406531515338. ✖ 1-C, 2-B, 3-A, 4-D

6406531515339. ✔ 1-C, 2-D, 3-A, 4-B

Question Number : 153 Question Id : 640653455732 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

A company website is supposed to allow its users to submit applications for various jobs posted on the site. Each application consists of several forms that users must complete in a step-by-step manner. In each form there are several buttons, including the `Back` button, by clicking which the user can move to the previous form to change any entry they have already submitted, the `Cancel` button to delete all the entries in the current form at a time, `Close` button to be clicked to cancel the entire application when users feel they do not want to continue with the application.

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

Options :

6406531515340. ✖ Recognition over recall

6406531515341. ✖ Consistency

6406531515342. ✖ Clean and functional design

6406531515343. ✔ Freedom

Question Number : 154 Question Id : 640653455733 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Mr Dubey has installed an application in his smartphone that can be used as a remote control for his television. The app displays five buttons, four labelled `A`, `B`, `C`, and `D`, and one labelled `Manual`. The buttons `A`, `B`, `C`, and `D` have different functionalities. However, Mr Dubey finds them difficult to remember, and he has to click on the `Manual` button to get the manual and understand how those buttons work. It frustrates Mr Dubey and discourages him from using the application.

Which of the following usability goals is not achieved by the application?

Options :

6406531515344. ✖ Effectiveness

6406531515345. ✖ Safety

6406531515346. ✔ Memorability

6406531515347. ✖ Safe to use

Question Number : 155 Question Id : 640653455734 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Which of the following requirement-gathering techniques is best for highlighting areas of conflict while also assisting in the development of consensus?

Options :

6406531515348. ✖ Questionnaires

6406531515349. ✖ Interviews

6406531515350. ✔ Focus groups and workshops

6406531515351. ✖ Naturalistic observations

Question Number : 156 Question Id : 640653455735 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Consider a web application that allows its users to purchase medicines online. The user story for searching for medicine is given below.

```
1 Feature: Search for medicines
2
3 As a customer,
4
5 I want to search for a medicine by its generic name,
6
7 So that I get a list of brand names along with the price for the given generic name.
  The website must show the list in a reasonable amount of time.
8
```

The user story is rectified as follows:

```
1 Feature: Search for medicines
2
3 As a customer,
4
5 I want to search for a medicine by its generic name,
6
7 So that I get a list of brand names along with the price for the given generic name.
  The website must show the list within a second.
8
```

Which of the SMART characteristics is achieved by rectification?

Options :

6406531515352. ✖ Specific

6406531515353. ✔ Measurable

6406531515354. ✖ Achievable

6406531515355. ✖ Timeboxed

Question Number : 157 Question Id : 640653455736 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

In which of the software development models is it more important to respond to changes than to stick to a plan?

Options :

6406531515356. ✖ Waterfall

6406531515357. ✖ Prototype

6406531515358. ✖ Spiral

6406531515359. ✔ Agile

Sub-Section Number :	3
Sub-Section Id :	64065365962
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 158 Question Id : 640653455713 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

What are the primary applications of knowledge sharing tools in software development?

Options :

- 6406531515267. ✔ The tools can be used for sharing documents and archiving decisions.
- 6406531515268. ✖ The tools enable all members of the team to get a big picture of the project along with a detailed view of its progress.
- 6406531515269. ✔ The tools can be used to apply the knowledge gained in one project to another project.
- 6406531515270. ✖ The tools mainly include IDEs that help the developers to be more productive.

Question Number : 159 Question Id : 640653455737 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

You want to add a feature to the git repository `TaskScheduler` for which you need to add two files `task.java` and `main.java` in the repository. For this task, you are planning on doing your first commit to this repository. Select all commands which are required to do your first commit.

Options :

6406531515360. ✓ git commit

6406531515361. ✓ git add

6406531515362. ✖ git restore

6406531515363. ✖ git init

Sub-Section Number :	4
Sub-Section Id :	64065365963
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653455717 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 : (160 to 161)

Question Label : Comprehension

Consider the following code base in Python, and answer the given subquestions.

```
1 def dayStatus(day):
2     if day <= 0 or day > 7:
3         print("Invalid day")
4     else:
5         if day < 6:
6             print("weekday")
7         else
8             print("weekend")
```

Sub questions

Question Number : 160 Question Id : 640653455718 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

Identify the sets of valid test cases for branch coverage.

Options :

6406531515283. ✖ {day = 0, day = 5}

6406531515284. ✖ {day = -1, day = 5, day = 8}

6406531515285. ✔ {day = 0, day = 5, day = 7}

6406531515286. ✔ {day = 5, day = 6, day = 9}

Question Number : 161 Question Id : 640653455719 Question Type : MCQ Is Question

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

Correct Marks : 4

Question Label : Multiple Choice Question

Identify the sets of valid test cases for multiple condition coverage.

Options :

6406531515287. ✔ {day = 0, day = 8, day = 5, day = 7}

6406531515288. ✖ {day = -1, day = 8, day = 5, day = 1}

6406531515289. ✖ {day = 0, day = 5, day = 7}

6406531515290. ✖ {day = 5, day = 6, day = 9}

Speech Tech

Section Id :	64065329451
Section Number :	7
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	7
Number of Questions to be attempted :	7
Section Marks :	40