Phase 2

Which of the following is a valid jspService() method signature?

private void _jspService(HttpServletRequest request, HttpServletResponse response)throws ServletException java.io.IOException

public void jspService(HttpServletRequest request, HttpServletResponse response)throws ServletException, java.io.IOException

public void jspService(HttpServletRequest request, HttpServletResponse response) throws ServletException

public void jspService(HttpServletRequest request, HttpServletResponse response) throws java.io.IOExcepвал

How can we hook initialization or clean up code in Spring?

Using custom init() and destroy() methods

Using interfaces InitializingBean and DisposableBean

Using <bean> tag

It is not possible

To initialize the session factory in java hibernate choose the appropriate function Configuration configuration=new Configuration().configure(). SessionFactory sessionFactory = configuration. _____().

buildSessionFactory

sessionFactory

newSessionFactory

createSessionFactory

How can you define property placeholders in Spring XML configuration?

Using the <context:property-placeholder> tag

Using the <context:value> tag

Using the <context:property> tag

Using the <context:placeholder> tag

What does MIME stand for?

Multipurpose Internet Mail Extension

Multipurpose Internet Media Extension

Multipurpose Intranet Media Extension

Multipurpose Internet Messaging Extension

Please refer below

What will be the output of the following code snippet?

< page language="java"

<html>

<head></head>

<body>

<java.util.Date now-new java.util.Date(); $>

<H1><= now.getHours() >:<=now.getMinutes()>:<=now.getSeconds() %></I>

</body>

</html>>

It will display the date as mm:dd:yy

It will display the date and time

It will display time as hh/mm/ss

It will display the current time as hh:mm:ss

Which method is required for loading a database driver in JDBC?

connectDriver()

DriverManager.getConnection()

Class.forName()

getConnection()

What are the modules of the core container?

Beans, Core, Context, SpEL

Core, Context, ORM, Web

Core, Context, Aspects, Test

 Bean, Core, Context, Test

What are the appropriate methods for a Hibernate Session Object?

save()

load()

get()

remove()

destroy()

Please refer below

What will be the output for the following code?

Testlervlet:

ServletContext context getServletContext(); String ne(String)context.getAttribute("company"); context.setAttribute("company", "VisualBase"); System.out.println(n);

Web.xml:

<context-param>

<param-name>company</param-name>

<param-value>HaleTech</param-value>

</context-param>

Tech Hale

null

Visual Base

Runtime Exception

Consider the following JSP page source:

1) <%@ page import="java.io.*">

2) <html>

3) <body>

4) <%

5) PrintWriter out response.getWriter();

6) out.write("X");

7)%>

8) <tout.write("Y");>

9) </body>

10)</html>

Which of the following are true statements about the above code?

"X" will be written to the response, followed by "Y"

Only "Y" will be written to the response

The page has a compilation error because of a directive syntax error

In jsp technology it is a bad idea to get hold of the PrintWriter directly from the response

The page has a compilation error for other reasons

What code is needed to configure foreign key mapping on the database side?

private List<Page> pages = new ArrayList<page>()

@OrderColumn(name = "pageNumber", insertable=true)

@OneToMany(cascade=Cascade Type ALL fetch=FetchType EAGER)

@JoinColumn(name= "storyID", updatable=false)

David is working on a web application. He wants to have a functionality that will enable him to W session used by the user is from cookie or from URL

isRequestedidFromCookie

isRequestedSessionIdFromURL

isRequestedid FromURL

isRequestedSessionIdFromCookie

Requested SessionIdIsFromCookie

Henry U1001

null

O Henry

NullPointerException

Henry null

To create a database only if it doesn't exist, which clause is used?

IF EXISTS

IF NOT EXISTS

O CREATE EXISTS

EXISTS IF

Consider the following JSP code sippet

Employeeeltaan john (Employeeellean)request.getAttribute("john")

if (John sall)

harry naw EmployeeBean() request.setAttribute("Join, john)

Which one of the following is an equivalent action code for the above code?

<jsp declareBean id="john" class = "EmployeeBean" scope="request" />

<jsp.createBean id = "john" class = "EmployeeBean" />

<jsp:useBean id="john" class = "EmployeeBean" scope="request" />

<jsp useBean id="john" class = "EmployeeBean" />

Please refer below

FoxTravels maintains two classes Driving License and Citizen. They have one to one relationship between them. Assume that these two classes are annotated correctly with Cascade Type ALL and there are no records currently available in the database.

What will be the output of the code given below?

DrivingLicense dl new Driving License(); dl.setLicenceNumber(101); Calendar issueDate = Calendar.getInstance(); issueDate.set(12, 12, 2005); Calendar expiry Calendar.getInstance(); expiry.set(12, 12, 2025); dl.setLicenceIssued(issueDate); dl.setLicenceExpiry(expiry); dl.setVehicleType("LMV") Citizen citzn = new Citizen(); citzn.setcustId (5001); citzn.setcustName("Ram"); citzn.setDrivingLicense (d1); session.getTransaction().begin(); session.persist (citzn); session.getTransaction().commit();

One record will be inserted in Driving License Table and one record will be inserted in Citizen Table

One record will be inserted in Driving License Table but no record will be inserted in Citizen Table

No record will be inserted in Driving License Table but one record will be inserted in Citizen Table

No record will be inserted in Driving License Table and no record will be inserted in Citizen Table

In the case of stored procedures, which statements are true regarding IN parameters?

IN Parameter is the default parameter

IN Parameter value should be passed to the procedure for processing

The same parameter will serve as input and output

The IN parameter is a variable whose value will change in the invoked procedure

Which clause of the select statement below can be used to sort the records on a specific coLOUMN

Sort

Group

Filter

Collate

Identify the different values which a scope attribute of a <jsp:useBean>action can set

page, request, session and application

page and request only

page, request, response and application

page, response, session and application

Identify what are the object states in 4,8,11,154 16.

Transient, Persistent, Detached, Persistent, Persistent

Transient, Persistent, Persistent, Detached, Persistent

Transient, Persistent, Detached, Detached, Detached

Transient, Persistent, Detached, Detached, Persistent

package com.test.service;

public class Mobilservice (

private String mobileName; public chilafervice() {}

//getter and sattar methods

ApplicationContext ace new ClassPathXmlApplicationContext("configml"); PersonService pl (PersonService) ac.getBean("personService"); Bystem.out.println("I have: "+pl.getMob().getMobileName());

What is the output of the above code after execution?

Display mobile name as "null"

Display mobile name as "Nokia"

Display mobile name as "Samsung"

Runtime Exception

Please refer below

A JSP page called test.jsp is passed with a parameter name in the URL, using http://localhost/test.jsp?naman Johar The code

<! String myName=request.getParameter()> < String teat "welcome" myName: >

<= testi>

What will be the output for the following code?

The program prints "Welcome John"

The program gives a syntax error because of the statement <%! String myName=request.getParameter();%>

The program gives a syntax error because of the statement <% String test= "welcome" + myName; %>

The program gives a syntax error because of the statement <%= test%>

Which operators test whether a subquery returns any rows? select one corect answer?

IN and NOT IN

EXISTS and NOT EXISTS

PRESENT

ABSENT

Which method call creates a binary output stream in a servlet?

response getOutputStream().

request.getWriter().

request.getOutputStream();

response.getWriter();

Session.geOutputStream();

How will you access a servlet context initialization parameter named "company

Sfinit company name)

$(init['company-name'])

$(initParam['company-name'])

$(contextParam company-name)

Which method will be used to execute the Stored Procedure?

execute() of CallableStatement

executeProcedure() of Statement

run() of ProcedureCommand

execute() of StoredProcedure

Please refer below

Consider Mobile Service class with two properties mobile Number and model as shown below.

package com.test:

public class Mobileservice(private long mobileNumber;

private String model:

//parameterized constructor

public MobileService (long mobileNumber, String model) (this.mobileNumber = mobileNumber; this.model = model:

}}

config.xml -Configuration file as below:

<bean id="mobileService" class="com.test. MobileService"> <constructor-arg value="Nokia"/> <constructor-arg value="1234567892"/>

</bean>

The main method of the application is shown below:

ApplicationContext ac=new ClassPathXmlApplicationContext("config.xml"); MobileService m = (MobileService)ac.getBean ("mobileService");

What is the output of the above code after execution?

Throws Exception as the constructor arguments are not passed in appropriate order in the bean definition

mobileService bean of MobileService class type is created with values as "1234567892" for mobile Number and "Nokia" for model

mobileService bean of MobileService class type is created with values as "0" for mobile Number and "1234567892" for model

OmobileService bean of MobileService class type is created with values as "0" for mobileNumber and "null" for model

Which data type is used to store date and time in MySQL?

Numeric data type

Text data type

Temporal data type

Char/Varchar

Which of the following statements about views is true in MySQL?

Some views are updatable, but must satisfy specific conditions on the columns.

All views are updatable in MySQL

Views are not updatable in MySQL

MySQL does not support materialized views, so no insert or updates on views can be performed

Please refer below

Given the HTML form:

1. <html>

2. <body>

3. <form action="submit.jsp">

**4. Name: <input type="text" name="il">
 5. Price: <input type="text" name="12">
**

6. <input type="submit">

7. </form

8. </body>

9. </html>

Product Class:

package com.example;

public class Product {

private String name:

private double price; public Product() {

public String getName() { return name:

}

public void setName(String name) {

}

this.name name:

public double getPrice() {

return price:

}

public void setPrice (double price) { this.price price:

}}

Assume the product attribute does NOT yet exist in any scope.

Which code snippet, in submit.jsp, instantiates an instance of com.example.Product that contains the results of the form submission?

<jsp:useBean id="com.example.Product" /> <jsp:setProperty name="product" property="" />

<jsp:useBean class="product1" id="com.test.Product" /> ${product.name = param.i1}
${product.price = param.12)

<jsp:useBean id="product" class="com.example.Product"> <jsp:setProperty name="product" property="name" param="11" /> <jsp:setProperty name="product" property="price" param="i2" /> </jsp:useBean>

<jsp:useBean id="product" type="com.example.Product"> <jsp:setProperty name="product" property="name" value="<%= request.getParameter("i1") %>" /> <jsp:setProperty name="product" property="price" value="<%= request.getParameter("2") %>" />

Which of these can use the context component-scan XML element for its bean configuration

FileSystem.XmlApplicationContext..

AnnotationConfigWebApplicationContext

AnnotationConfigApplicationContext

ClassPathXmlApplicationContext.

Choose the types of advice in spring AOP.

Before, After, After-Returning, After-Throwing, Around

Where, After-Returning, After-Throwing, Around

Then, After, After-Returning, Anier-Throwing. Around

When, After, After-Returning, Around

Please refer below

Consider the following JSP page source

1) < page import="java.io.*">

2) <html>

3)<body>

4) <%

5)PrintWriter out =response.getWriter():

6)out.write("X");

7) %>

8)<%out.write("Y");%>

9) </body>

10) </html>

Which of the following are true statements about the above code?

"X" will be written to the response, followed by "Y"

Only "Y" will be written to the response

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The page has a compilation error for other reasons

PHASE 3

Which of the following annotation supports auto Scan feature of Spring?

Options

- @Component//Answer

- @Value

- @Autowired

- @Qualifier

What is a self-managed solution that provides source code collaboration for professional teams of any size, across any distance?

Options

- Bitbucket//Answer

- Git

- Github

- docker hub

What is true about the following @Entity association between House and Window?

@Entity

```java
public class

Window { @Id

private int winNo;



@ManyToOne

private House

aHouse; @Entity

public class House

{ @Id

private int houseNo;

@OneToMany(mappedBy="aHouse

") private List windows;

}
```

· It's One ToMany unidirectional association

· It's One ToMany bidirectional association//Answer

· The association owner is the House class//Answer

· The association owner is the Window class

Which of the following are the features of REST

API? Options

· It is stateful.

· It supports JSON and XML.//Answer

· It is simple than SOAP.//Answer

· REST API can also be used for mapping data from a cloud platform to a data warehouse//Answer

Which of the following are the features of DevOps?

Options

· Automation.//Answer
· Collaboration.//Answer
· Integration.//Answer
· Deployment.

Jenkins. is a suite of plugins which supports implementing and integrating continuous delivery pipelines into

Options

· Jenkins Pipeline//Answer

· Jenkins Job

· Jenkins build

· Jenkins procedure

Which statement/statements below is/are incorrect?

Options

· First of all method annotated as @BeforeAll execute only once.

· Lastly, the method annotated as @AfterAll executes only once.

· Method annotated as @Before executes for each test case but before executing the test//Answer

· Fixture includes tearDown() method which runs after all test methods get executed.

Which folder is used to publish the html and web pages?

Options

· Static//Answer

· resources

· html

· jsp

Which of the following are true about handling "HTTP OPTIONS" method in Spring

REST? Options

- If the Request-URI is an asterisk ("*"), the OPTIONS request is intended to apply
  to the se//Answer

- If the Request-URI is not an asterisk, the OPTIONS request applies only to the
  options th communicating with that resource//Answer

- Responses to this method are cacheable

- Responses to this method are not cacheable//Answer

Select all the statements that are relevant and correct with respect to Spring framework.

Options

- DI offers more flexibility//Answer

- IOC and DI go together//Answer

- Spring DI encourages programming to interfaces//Answer

- Spring does not support programmatic configuration

JDBC Template class follows design pattern. Options

- factory
- observer
- template //Answer
- MVC

Which Bean type, when used with JPA, is connected to a database? Options

- jpa.Database

- javax.persistence.DatabaseConnection

- javax.sql.DatabaseConnection

- javax.sql.DataSource//Answer

Which is a peculiar quality of the Spring Boot platform?

Options

- It is scalable

- It is micro-service ready//Answer

- It is macro-service ready

- Undecided

annotates classes at the service

layer. Options

· @Component

· @Controller

· @Service//Answer

· @Repository

The Jenkins default username is

Options

· Admin//Answer

· jenkins

· user

· administrator

A	can be considered as a particular task to achieve a required objective in

Jenkins Options

· Job//Answer

· plugin

· pipeline

· function

Choose the components with which Jenkins is more closely integrated.

Options

· Build tools like Maven.//Answer

· Version Control systems like Git and SVN (Apache Subversion).//Answer

· Eclipse

· VS Code

Which attribute is used to set the scope of the bean?

Options

· Scope//Answer

· setScope

· getScope

· assignScope

What annotation would you apply to the component which holds business logic in your application?

Options

· @Component

· @Controller

· @Service//Answer

· @Repository

How can we hook initialization or clean up code in

Spring? Options

· Using custom init() and destroy() methods//Answer

· Using interfaces InitializingBean and DisposableBean//Answer

· Using <bean> tag

· Using @PostConstruct and @PreDestroy//Answer

Which of the following class is used to call REST Services? Options

- · RestController
- · Controller
- · RestTemplate //Answer
- · JdbcTemplate

Which of the following is true about AOP Advice? Options

- · An action taken by an aspect at a particular Join point.//Answer

- · A point during the execution of a program.

- · An aspect and a Pointcut.

- · A predicate that matches Join point

@Resource follows semantics.

Options

- · constructor

- · autodetect

- · by-name//Answer

- · by-type

annotation is used to have more control over selection of bean to be injected.
Options

· @Qualifier//Answer
· @Require
· @Value
· @Inject

What is not true for Spring framework?

Options

· Spring framework is a light weight framework

· Spring framework is not open source//Answer

· Spring provides Dependency Injection

· Spring targets only Java web application development//Answer

The   annotation indicates that a particular class serves the role of a

repository. Options

· @Component

· @Controller

· @Service

· @Repository//Answer

Which of the following are the advantages of
IOC? Options

There is a tight coupling of the execution of a certain task from implementation. Every module can focus on what it is designed for.//Answer

Replacing modules has no side effect on other modules.//Answer It supports eager and lazy instantiation for services.//Answer

Which are the modules of the Data Access/Integration layer?
Options

· JDBC, ORM, Web

· OJDBC, ORM, Beans

· JDBC, ORM, OXM, JMS, Transactions//Answer

· OJDBC, ORM, XML, JMS

What is the Life Cycle state as an object is no more associated with the session, modifications in the data don't affect any changes in the database?

Options

· New/Transient//Answer
· Managed
· Detached
· Persisted

Which Spring module automatically provides implementations for CRUD operations on your database entities?

Options

· Spring Security
· Spring ORM

· Spring MVC
· Spring Data//Answer

Consider the GreetingService class given below:

```
package com.test.service;
public class
GreetingService { private
String greeting; public
String getGreeting() {
return greeting;

}

public void setGreeting(String greeting) {
this greeting = greeting;

}
```

A Spring configuration file(config ml) defining bean of the GreetingService class is show below

```
<bean id = "greetingService" class = "com test service. Greeting Service" />
```


The main method of the application includes the following statements:
```
ApplicationContext context = new ClassPathXmlApplicationContext("config.xml");
Greeting Service greetingService = (Greeting Service) context. getBean("greeting
Service"); greetingService.setGreeting("Hi, Welcome to Spring Course!!");

System.out. printIn(greeting Service. getGreeting());
WebCam
```

What will happen when we execute the above main method?
Options

· Displays the greeting message "Hi, Welcome to Spring Course!!" //Answer
· Displays null as the greeting property is not initialized
· POJO class setter method cannot be invoked on the bean
· RunTime Exception

What are the sub-classes type, SpringApplication will attempt to create the right type of
ApplicationContext?

Options

· AnnotationConfigApplicationContext//Answer

· ConfigurableWebApplicationContext//Answer

· ServletWebServerApplicationContext//Answer

· AnnotationConfigServletWebServerApplicationContext
· ConfigurableWebServerApplicationContext

Service

@Transactional(readOnly = true, propagation =
Propagation. REQUIRED)

public class UserServiceImpl implements
UserService {

@Transactional (propagation = Propagation.
REQUIRES_NEW)

@Override

public User findById(Long id) {
return userRepo. findById(id);

}}

What can be said about the findById() method?

· The method is executed in a new transaction//Answer

· When a method is executed, an exception will be thrown because the transaction is not c
· The method is executed in an existing transaction
· The method is executed in a new transaction by terminating the outer transaction

Choose all statements that describe Spring MVC.

· It follows MVC-II model
· It follows Front Controller Design Pattern//Answer
· It follows MVC -I model

• DispatcherServlet acts as front controller//Answer

Which of the following is a repository hosting service tool that features collaboration and access control?

Options

- Bitbucket
- Git
- Github//Answer
- docker hub

Which of the following are true regarding the below Spring controller?

@RestController

public class OwnerController {

@RequestMapping(value = "/owner/{ownerId}", method = RequestMethod.POST)

@ResponseBody

public Owner findOwner(@PathVariable("ownerId") int ownerId) {

return new Owner();

}

}

Options

- RequestMethod.GET method is more accurate than POST//Answer

- @PathVariable should be replaced with the @PathParam annotation

- Returning the 201 HTTP status code is better

- @ResponseBody could be removed//Answer

In addition to application.properties files, profile-specific properties can also be defined by using the following naming convention.

Options

- application-default-{profile).properties
- application-{profile}.properties //Answer
- application-{profile}.yml //Answer
- application-default.properties //Answer

A   block defines a conceptually distinct subset of tasks performed through the entire

pipeline. Options

- Stage//Answer
- Node
- step
- job

What is the purpose of assertArrayEquals(A,

B,"message")? Options

- Checks that "message" is in both A and B

- Checks that "message" is in A but not B

- Checks that "message" is in B but not A

- Asserts the equality of the A and B arrays//Answer

Which among these is not an application server provided by Spring Boot?

Options

- Embedded tomcat

- Undertow

- Jetty

- Binary link//Answer

If you find that specific auto-configuration classes that you do not want are being applied, you can use the exclude attribute of to disable them.

Options

- @Configuration

- @EnableAutoConfiguration//Answer

- @SpringBootConfiguration

- @ComponentScan

Which of the following are DevOps tool?

Options

- Git//Answer

- Jenkins//Answer

- Maven//Answer

- Eclipse

Which of the following are true regarding spring beans?

- Spring beans are managed by the Spring IoC container.//Answer
- Spring beans are instantiated, assembled, and otherwise managed by a Spring IoC container //Answer

- Spring beans are simple POJOs.//Answer
- It is a must to configure spring beans in XML.

The software engineering practice of merging all developer working copies to the shared mainline several times aday is known as

Options

- Continuous integration//Answer

- Continuous deployment

- Continuous delivery

- DevOps

For consistent exception handling, which annotation is used to translate Hibernate exceptions into Spring DataAccessException?

Options

- @Translation

- @Repo

- @Repository//Answer

- @Component

Which of the following are build automation

tool? Options

- Gradle//Answer

- Maven//Answer

- Jenkins//Answer

- Docker

Which of the following Hibernate session method hits database always?

Options

- get()//Answer
- load()
- loadDatabase()
- getDatabase()

Select a statement that is TRUE in relation to the After Throwing advice.

Options

· The advice which handles the exceptions thrown from the Join point

· The advice that gets executed only when the Join point throws an exception.

· Advice that gets executed before the Join point.

· Advice that gets executed only when the Join point executes successfully

The correct expression form for

SpEL is Options

· {{<expression string> }}

· #{ <expression string> }//Answer

· #<expression string>

· ${<expression string>}

Which one of the following allows a single team to handle the entire application lifecycle from development to testing, deployment, and operations?

Options

· Jenkins

· DevOps//Answer

· Git

· Maven

Given the following configuration class, Choose the correct statements.
public class ApplicationConfig {

private DataSource dataSource;
@Autowired

public ApplicationConfig(DataSource dataSource) {
this.dataSource = dataSource;

}

@Bean(name="clientRepository")
ClientRepository jpaClientRepository() {
return new JpaClientRepository();

}}

Options

· @Configuration annotation is missing//Answer
· Default or no-arg constructor is missing//Answer
· @Bean name is ambiguous
· @Bean scope is prototype

What is the type returned by the findById() method implemented by default by a CrudRepository?

Options

· List

· String

· The type mapped to the CrudRepository

· Optional Class//Answer

is executed after a join point completes normally i.e., if a method returns without throwing an exception

Options

- · After Return Advice//Answer
- · After Advice

- · Around Advice

- · After Throwing Advice

To enable all actuator end points for monitoring, which of the following property should be enabled.

Options

- · management endpoints web exposure include="//Answer

- · management endpoints web exposure.all="

- · management endpoints web exposure enable="

- · management endpoints enable exposure="

In a Spring application, it is possible to define a class which maps to a table in a relational database Which of these Spring annotations can be applied to such a class to map it to a specific table in the connected date?

Options

· @Record

· @DBTable

· @Map

· @Table//Answer

is the factory class that is used to get the Session

objects Options

· SessionFactory//Answer

· ConnectionFactory

· Configuration

· HibernateSession

Select the statement regarding Spring Data JPA that is

true. Options

· It is an IoC container to manage beans.

· It is meant to access data in a Redis store

· It is one of the projects under the Spring Data umbrella.//Answer

· It is meant to work with data in graph databases

Which annotation is used to retrieve path params?

Options

· @PathVariable//Answer

· @RequestParam

· @Param

· @RequestParameter

Which of the following REST URI is used to retrieve all the

users? Options

· GIT/users

· GET/used

· GET/users//Answer

· GIT/used

Where does the spring container locates the definition of DispatcherServlet?

Options

· In the bean configuration file

· In the web.xml//Answer

· META-INF/dispatcher.xml

· 00 WEB-INF/dispatcher.xml

Which of the following is not a DevOps tool?
Options

- Git
- Jenkins
- Maven
- Gradle//Answer
- Eclipse

Which of the following is the IoC containers in Spring?
Options

- BeanFactory, BeanContext, IocContextFactory
- BeanFactory, ApplicationContext //Answer
- BeanFactory, ApplicationContext, BeanContext
- BeanFactory, ApplicationContext, IocContextFactory

What will be the output for the following piece of code?

//The JUnit files are imported public class TestClass
‹ @Test

```
public void testingMethod() {
String message = "Test";
assertEquals(3,message.lengt
h());

}}
```

Options

· Compilation Error

· Runtime Error
· Test Ran with Success
· Test Ran with Failure//Answer

Which artifact provides the inheritance for all the necessary

dependencies? Options

· spring-boot-starter-parent//Answer

· spring-boot-starter

· spring-boot-maven-plugin
· spring-boot-starter-web

In Spring, which class/interface is used to map a database row to a Java object?

Options

· ResultSet

· RowSetMapper

· ResultSetMapper

· RowMapper//Answer

In which phase DevOps really kicks

in? Options

· Build//Answer

· Plan

· Code

· Release

Which of the following tools provide quick build for distributed systems?

Options

· Spring solution
· Spring boot
· Spring cloud//Answer
· Spring MVC

Which of these are valid in the use of the @RequestMapping annotation, in Spring MVC?

Options

· @RequestMapping(method RequestMethod GET)
· @RequestMapping("/")//Answer
· @RequestMapping(value="offline", method RequestMethod GET)//Answer
· @RequestMapping(name "")

Select the correct option that describes the responsibilities of XmlBeanFactory.

Options

- This implementation allows you to express the objects that compose your application//Answer
- Resolve inter-dependencies between such objects, in terms of XML //Answer

- The XmlBeanFactory takes this XML configuration metadata and uses it to create a fully configured system or application//Answer
- It is just an interface and does not contain any implementation

Prefix and Suffix are the properties of

Options

- Abstract Controller

- Form Controller

- DefaultHandlerMapping

- Internal ResourceViewResolver//Answer

What is true about the following @Entity association between House and Window?

```java
@Entity

@Id

private int winNo;

public class Window { private House aHouse;

ToOne

@Entity

public class House {

@Id

private int houseNo;
```

@OneToMany(mappedBy="aHouse")

private List windows;

Options

- It's One ToMany unidirectional association
- It's One ToMany bidirectional association//Answer
- The association owner is the House class
- The association owner is the Window class

The. annotation indicates that a particular class serves the role of a controller.

- @Component
- @Controller//Answer
- @service
- @Repository

Which of the following is the correct sequence of Spring Bean life cycle?

Options

- Instantiation,2) Dependency Injection,3) Initialization,4) Business Method Excecution,5) Destruction//Answer
- Instantiation,2) Initialization,3) Dependency Injection,4) Business Method Excecution,5) Destruction
- Instantiation,2) Initialization,3) Business Method Excecution 4) Dependency Injection,5) Destruction
- Instantiation,2) Dependency Injection,3) Business Method Excecution

Which of the following features helps in developing a loosely coupled application in Spring?

Options

- POJO based programming//Answer
- Invasive feature
- Dependency Injection//Answer
- AOP//Answer

DAO implementation needs access to persistence resource, to inject this resource which of these annotations will be used

Options

- @Autowire//Answer
- @Context
- @Resource//Answer
- @inject

What are the different Advice types present in Spring

AOP? Options

- When, After, After-Returning, Around
- When, After, Around, After-Returning
- Before, After, After-Returning, After-Throwing, Around //Answer

· Where, After, After-Returning, After-Throwing, Around

Jenkins is a tool:

Options

· Continuous Integration Continuous Delivery //Answer
· Build
· Deployment

· Versioning

In which phase DevOps really kicks

in? Options

· Build//Answer
· Plan
· Code
· Release

Select the option for which the 'Autowired' annotation can be applied.

Options

· constructors and methods
· fields, setters and getters
· Constructors //Answer
· fields, constructors, methods

Phase -3

1.What are the features of Jenkins?

- It is a free and open-source automation tool//Ans

- Jenkins provides a vast number of plugins//Ans

- It is difficult to set up and install on multiple operating systems

- Provides pipeline support.//Ans

2. Assume you have implemented a one-to-one relationship in your JPA application using the @Mapsid annotation in one of the entity class definitions. Which statement about the corresponding tables created is TRUE?

- There will be two tables with foreign key references in both classes, referencing each other

- No tables will be created

- There will only be a single table created with one entity embedded in the other

- There will be two tables with a foreign key reference from one class to another//Ans

3. Which techniques using Spring will achieve inversion of control?

- Model-view-controller paradigm

- Factory pattern//Ans

- Builder pattern

- Dependency injection//Ans

- Server locator pattern//ANS

4.Which annotations can be added to your Spring Boot application to enable auto-configuration?

- @EnableAutoConfiguration//Ans

- @EnableAutoConf

- @SpringBootApplication//Ans

- @EnableSpringAutoConfiguration

- @SpringBootAutoConfiguration

5: Choose the components with which Jenkins is more closely integrated

- Build tools like Maven//ans

- Version Control systems like Git and SVN (Apache Subversion)//Ans

- Eclipse

- VS Code

6. Which of the following properties can be used to configure a column in the JPA @Column annotation?

- columnLength

- column Type

- columnDefinition//Ans

- precision//Ans

- scale//Ans

7. Where can you add an external browser and change the default for the Spring Boot Dashboard?

- Spring Tool Suite -> 4 Preferences ->General-> Web Browser//Ans

- Spring-> Boot Dashboard -> Preferences-> Web Browser -> General

- Spring Tool Suite-> 4 Boot Dashboard -> General

- Boot Dashboard-> Show Properties-> Web Browser

8. Which of the following is true when you use the @IdClass annotation to specify composite keys?

- We do not need an additional class representing the composite key

- We need an additional class representing the composite key//Ans

- This annotation is to send up relationships and not to specify keys

- We need to use @ld annotations on composite key fields in the entity class//Ans

(9). Cyber Data team is working on a project which uses Spring JDBC with Spring Boot. Help the team to identify which of the below operations are supported and will be automatically handled by Spring Boot JDBC?

- Setting up loop for iterating over results

- Specifying SQL statements, declaring parameters and providing values

- Defining connection parameters like driver class name, database URL, username and password//Ans

- Opening connection, Preparing and executing statements, Processing exceptions, Handling Transactions, Closing.//Ans

10. If you have configured a table that you want to use to generate primary keys using the TABLE generation strategy, which of the following statements are true?

- Each table has an auto-incremented column for primary keys

- While sharing a database tables every entity which uses the TABLE strategy needs to have an entry in the shared table//Ans

- Every entity which uses the TABLE strategy needs to have a separate table

- Multiple can share the same table tables for primary key generation//Ans

11. Which of the following is true about update and delete queries in JPQL?

- You need to run these queries within a transaction//Ans

- JPQL can perform these queries on only record at a time

- JPQL does not support these queries

- You need to invoke executeUpdate() to run these queries//Ans

12. Assume you have configured your persistence.xml file with the property javax persistence schema- generation.database action with a value of drop-and-create. You have also set properties for a create script, a load script and a drop script with the names of create sql, drop.sql and load.sql. What is the order of execution of these scripts?

- create sql, load sql, drop sql

- drop sql, create sql, load sql//Ans

- load sql, drop.sql, create.sql

- The order is randomly assigned

13.The DataCore team uses the Spring framework for its data access layer's implementations, Initially, the team had used Spring JDBC, later migrated to Spring ORM. As per the current requirements, now the client needs the data access layer to be implemented using Spring Data JPA. Help the team identify, which among the following can be easily achieved using Spring Data JPA for the above implementation?

- Spring Data JPA provides common database operations support to an application, hence developers need not implement them//Ans

- Spring Data JPA provides inconsistency in data access layer implementation by using its interfaces.

- Spring Data provides support for both SQL and NoSQL databases

- Spring Data JPA reduces the number of artifacts in the data access layer as the only artifact required is the interface extends jpa repository//Ans

D)14.Which of the following are the features of DevOps?

- Automation//Ans

- Collaboration//ans

- Integration//ams

- Deployment

15.Which are the embedded servers that the spring-boot-starter-web dependency supports?

- Undertow//Ans

- httpserver

- Jetty//Ans

- Tomcat//ANS

- Ils

D(16).What Spring Starter Project options are configurable from the New Spring Start Project popup?

- Port

- Name//ans

- Service URL

- Java Version//ans

- Package//ans

- Annotation Class

D(17).The development team is working on fund Transfer method of Banking application. The team wants to know the default rollback policy in Spring transaction management. Identify the Correct options from the given statements

- Rollback for any Exception// ans

- Rollback for RuntimeException//ans

- Rollback for checked exceptions

- Always commit

- commit for checked exceptions

(D)19. Which of the following are advantages of modelling relationships using embedded objects?

- The same embeddable can be shared across multiple entities//Ans

- JPA providers are more performant with embedded objects

- Easier to use embeddables rather than individual fields//Ans

- Can represent relationships using composition in the object-oriented world//ANS

20.How can you select multiple fields using a Criteria API query?

- Using the criteriaQuery selectAll() method//Ans

- Using the criteriaQuery select() method

- Using the criteriaQuery multiselect() method//Ans

- This is not possible using the criteria API.

21.Select the correct statements about JPA and Hibernate.

- JPA is an implementation of Hibernate/

- Hibernate is a specification for persisting data

- JPA is a specification for persisting data//Ans

- Hibernate is an implementation of JPA.//Ans

22.Within your programming language you want to model composition i. e, one object is composed or nested within another. However, the fields of the nested object map to database table columns of the outer entity. What annotation will you use?

- @Flatten

- @Compose

- @Embedded//ans

- @Nested

- @Composite Embedded

23.Which of the following are the advantages of Jenkins?

- Cost Savings//ANS

- Plugin EcoSystem//ANS

- Increased Productivity//ANS

- Increased Development Time

24.What annotation must be used when creating a Rest Template Application method using the Rest TemplateBuilder to call REST services from other Spring Boot applications?

- @BeanApplication

- @Spring

- @SpringBeanApplication

- @Bean//Ans

25.Which of the following are build automation tool?

- Gradle//ans

- Maven//Ans

- Jenkins//Ans

- Docker

26.Which of the following is true for the generation strategy SEQUENCE for primary key generation?

- It uses an auto-incremented column to produce a sequence of primary keys

- It uses a database sequence generator to generate primary keys//ANS

- Multiple tables can use the same sequence generator//Ans

- It uses a shared table where sequential primary keys are stored

27.There is a member variable in Entity object which does not map to any database table column. What should we do with that member variable?

- Do nothing, JPA+ Hibernate will figure out that the column is not mapped

- Annotate it using the @DoNotPersist annotation

- Move the field out into a nested object

- Annotate it using the Transient annotation//ANs

--

28.Select the method signatures in a CrudRepository which are equivalent

- Car findTopByOrderByPrice()//Ans

- Car findFirstByOrderByPrice()//Ans

- Car findFirstByOrderByPriceDesc()
- Car findBySortByPriceLimit1()

29. Assume you have a class called Car and this has the following variables: id, make, model and price. You would like Spring to implement a method which returns all cars which have a price lower than a specified value. Which derived query method signatures will accomplish this?

- List<Car> findByPriceLess Than (double price);//Ans

- List<Car> findTopByPriceOrderByPriceAsc()(double price);

- Car findByPrice Lowest(double price);

- List<Car> findCarsCheaper Than(double price);

30. Which of the following is true for the generation strategy SEQUENCE for primary key generation?

- It uses an auto-incremented column to produce a sequence of primary keys

- It uses a database sequence generator to generate primary keys//Ans

- Multiple tables can use the same sequence generator//Ans

- It uses a shared table where sequential primary keys are stored

31. Assume you have a class called Car and this has the following variables: id, make, model and price. You would like to search for cars matching a particular model value, but you are not sure about the case used in the model, and you want the search to be case-insensitive. Which derived query methods can you configure in your CrudRepository to serve this purpose?

- findByModelIgnoreCase(String model)//Ans

- findByMakeAndModel(String make, String model)

- findByModel(String model)

- findByModelLike(String make)

(D)33. Which of the following statements are true about entities?

- Entity objects correspond to records in a database table//Ans

- They map to relationships between tables in a database//Ans

- They map to a table in the underlying database

- They represent constraints on values in a database table

34. When deploying your web application as an external war file what are the first two details you need to specify in your app?

- Have your configuration derive from SpringBootServletInitializer//Ans

- Set the Maven packaging as "war"//Ans

- Set the Maven packaging as external-war

- Have your configuration have the annotation @ExternalWar

35. Which of the following are the features of REST API?

- It is stateful.
- It supports JSON and XML.//Answer
- It is simple than SOAP.//Answer
- REST API can also be used for mapping data from a cloud platform to a data warehouse//Answer

D)36. Which of the following are true about handling "HTTP OPTIONS" method in Spring REST?

- If the Request-URI is an asterisk ("*"), the OPTIONS request is intended to apply to these//Answer
- If the Request-URI is not an asterisk, the OPTIONS request applies only to the options that communicating with that resource//Answer
- Responses to this method are cacheable

- Responses to this method are not cacheable//Answer

37. Select all the statements that are relevant and correct with respect to Spring framework.

- DI offers more flexibility//Answer
- IOC and DI go together//Answer
- Spring DI encourages programming to interfaces//Answer
- Spring does not support programmatic configuration

38. How can we hook initialization or clean up code in Spring?

- Using custom init() and destroy() methods//Answer
- Using interfaces InitializingBean and DisposableBean//Answer
- Using <bean> tag
- Using @PostConstruct and @PreDestroy//Answer

39. What is not true for Spring framework?

- Spring framework is a light weight framework
- Spring framework is not open source//Answer
- Spring provides Dependency Injection
- Spring targets only Java web application development//Answer

40. Which of the following are the advantages of IOC?

- There is a tight coupling of the execution of a certain task from implementation.
- Every module can focus on what it is designed for.//Answer
- Replacing modules has no side effect on other modules.//Answer
- It supports eager and lazy instantiation for services.//Answer

41. What are the sub-classes type, SpringApplication will attempt to create the right type of

ApplicationContext?

- AnnotationConfigApplicationContext//Answer
- ConfigurableWebApplicationContext//Answer
- ServletWebServerApplicationContext//Answer

- AnnotationConfigServletWebServerApplicationContext
- ConfigurableWebServerApplicationContext

42. Choose all statements that describe Spring MVC.

- It follows MVC-II model
- It follows Front Controller Design Pattern//Answer
- It follows MVC -I model
- DispatcherServlet acts as front controller//Answer

43. In addition to application.properties files, profile-specific properties can also be

defined by using the following naming convention.

Options

- application-default-{profile).properties
- application-{profile}.properties //Answer
- application-{profile}.yml //Answer
- application-default.properties //Answer

44. Which of the following are true regarding spring beans?

- Spring beans are managed by the Spring loC container.//Answer
- Spring beans are instantiated, assembled, and otherwise managed by a Spring loC container//Answer
- Spring beans are simple POJOs.//Answer
- It is a must to configure spring beans in XML.

D)45. Which of these are valid in the use of the @RequestMapping annotation, in Spring MVC?

- @RequestMapping(method RequestMethod GET)
- @RequestMapping("/")//Answer
- @RequestMapping(value="offline", method RequestMethod GET)//Answer
- @RequestMapping(name "")

46. Select the correct option that describes the responsibilities of XmlBeanFactory.

Options

- This implementation allows you to express the objects that compose your application//Answer
- Resolve inter-dependencies between such objects, in terms of XML //Answer
- The XmlBeanFactory takes this XML configuration metadata and uses it to create a fully configured system or application//Answer
- It is just an interface and does not contain any implementation

47. Which of the following features helps in developing a loosely coupled application in Spring?

Options

- POJO based programming//Answer
- Invasive feature
- Dependency Injection//Answer
- AOP//Answer

48. DAO implementation needs access to persistence resource, to inject this resource which of these

annotations will be used

Options

- @Autowire//Answer
- @Context
- @Resource//Answer
- @inject

49. Which of the following are the advantages of Spring Boot?

Options

- Create stand-alone Spring applications that you can just run.//Answer
- It basically removes a lot of configurations and dependencies.//Answer
- It provides opinionated 'starter' POMS to simplify your Maven configuration.//Answer
- We need to configure Spring Boot manually

50. Which of the following are Hibernate-specific Spring infrastructure beans?

Options

- SessionFactory//Answer
- Session
- Hibernate TransactionManager//Answer

- HikariDataSource
- LocalSessionFactoryBean//Answer

51. @Autowired annotation can be applied to members in a class.

Options

- Setters & Getters
- Setters//Answer
- Constructors//Answer
- Fields//Answer

52. What are the different ways to configure metadata in Spring?

Options

- XML Based configuration file//Answer
- Annotation based configuration//Answer
- Java based configuration//Answer
- Only XML or Annotation based is possible but not Java based

53.   Which of the following are the valid types of Hibernate object states?

Options

- persistent object//Answer
- transient obiect//Answer
- detached object//Answer
- attached object

Which of the following is the correct sequence of Spring Bean life cycle?
Options
- Instantiation,2) Dependency Injection,3) Initialization,4) Business Method Excecution,5) Destruction//Answer
- Instantiation,2) Initialization,3) Dependency Injection,4) Business Method Excecution,5) Destruction
- Instantiation,2) Initialization,3) Business Method Excecution 4) Dependency Injection,5) Destruction
- Instantiation,2) Dependency Injection,3) Business Method Excecution

CODE SNIP

(1).User
John works on a code implemented using Transactional annotation. Help him identify which among the lowing we come uniges of the annotation?

- (A)

```
@Transactional
public interface DataStoreService{
 void updateDetaStoreDetails (DetaStore DetaStore);
 void insertDataStoreDetails (DetaStore DetaStore);
}
```
- (B) //Ans
```
@Transactional
public class DataStoreServiceImpl{
//code goma hare
public void updateDataStormDetails (DataStore detaStore){
public void insertDetaStoreDetails(DetaStore dataStore){
//code goes hars
}
}
```
- (C) //Ans
```
public class DataStoreServiceImpl{
@Transactional
 public void updateDetalltoreDetails (Datastore Datastore){
//code goes here
}
```
- D)
```
public class DataStoreServiceImpl {
public void updateDataStageDetails (Datalitore datastore) {
@ Transactional
//code goes here
```

```
}
}
```

2. Consider the below given Spring Application code.

```
package com.test.service:

public class EmployeeService {

    private int employeeNo

    private String employeeName:

    @Autowired

    private Employee employee:

//getter and setter methods for all properties
}
package com.test.model:

public class Employee{

private int employeeId;
private String name;

private String role;

//getter and setter methods for all properties
```

Assume required beans are available in the Spring configuration. Select the correct options for the scenario mentioned above.

- Autowiring is generally advisable for workflow classes such as controller, service and repository classes.//Ans

- Code throws compilation error as @Autowired has been used in Employee Service class on domain reference(Employee employee).

- Domain object has to be created using new operator during database access to represent the data in a database.

- It is generally not advisable to make domain objects as Spring beans.//Ans

3. MphasisRun application has been developed to maintain the history of employees participating in all the run events organized by the company. The team uses JpaRepository for its back end implementation. The entity class used for storing the employee details in coded as shown below

```
@Entity
public class MphasiaRunners (
 @Id
private Integer mphasisRunnerEmpId;
private String mphasisRunner EmpName:

//getters and setters
}
```
Assume that mphasisRunners is an instance of MphasisRunners class. Help the team decide which among the following methods can be used to persist the MphasisRunners record?

- save(mphasis Runners)//Ans

- persist(mphasisRunners)

- saveAndFlush(mphasisRunners)//Ans

- save(mphasisRunnerEmpId)

4. Given the below code. (Assume necessary imports are done.)

```
@RestController
 @RequestMapping("/employee")
public class EmployeeController
{

    @PostMapping("/create")

    public EmployeeDTO addEmployee (@RequestBody EmployeeDTO employeeDTO){

//code to add employee and return the same back
 }
}
```

Choose the correct statement.

- @PostMapping is not supported when the controller class is annotated with @RequestMapping

- @PostMapping is not allowed to hold path matching info ("/create")

- Compilation Error

- This controller is perfectly fine and will work as expected //Ans

5. Consider the below given Spring Application code
 package com.test. service;
public class EmployeeService{
      private int employeello:
      private String employeeName;
     @Autowired
     private Employee employee;
        //getter and setter methods for all properties
}
package com.test.model;
      public class Employee{
      private int employeeId:
      private String name;
      private String role;

//getter and setter methods for all properties
}
Assume required beans are available in the Spring configuration. Select the correct options for the scenario mentioned above.

- Autowiring is generally advisable for workflow classes such as controller, service and repository classes.//Ans

- Code throws compilation error as @Autowired has been used in Employee Service class on domain reference(Employee employee).

- Domain object has to be created using new operator during database access to represent the data in a database.

- It is generally not advisable to make domain objects as Spring beans.//Ans

(6). Consider the following classes defined in a Spring Application:

```
package com.mphasis.service;
public class MobileService {
        long mobile Number;
        String model;
         public Mobileservice (long mobileNumber, String model) {
                     this. mobileNumber = mobileNumber;
                     this.model= model;
        }
         public MobileService() {
         }
         //getter and setter methods
}
package com.mphasis.service;
public class PersonService (
        private Mobileservice mobile;
      //getter and setter methods
}
```
The Spring configuration file includes the following declarations:
```
<bean id="ml" class="com.mphasis.service.MobileService">
                    <constructor-arg value="93423" />
                    <constructor-arg value="Nokia" />
</bean>
<bean id="personService" class="com.mphasis.service. PersonService" autowire="no" />
```
The main method for the application is defined as follows:
```
ApplicationContext ac= new ClassPathalApplicationContext("config.xml");
Personservice pl= (PersonService) context.getBean("personService");
System.out.println(pl.getMobile().getModel());
```
What is the output of the above code execution?

- Throws Exception//Ans
- Display mobile name as "Nokia"
- Display mobile name as null
- Display model name as null

(7. Identify the correct annotation to be placed in the blanks given below.
```
 package mypack;
@Repository (value = "librarydaobean")
public class Library DAOImpl implements ILibraryDAO
{ private EntityManagerFactory emf;
------------------------------------------------------
public void setEntityManagerFactory (EntityManagerFactory emf)
```

```
{            this.emf = emf;
}
```

- ▪ @Persistence Unit

- ▪ @PersistenceContext//Ans

- ▪ @Persistence

- ▪ @Autowired//Ans

(D)8. Assuming necessary imports are done, what is the output when following code is executed?

```
package com.test.service;
@Service
public class CustomerService {
public Customer Service () {
        System.out.print("Customerservice constructor called ")
    }
}
package com.test.dao;
@Repository
public class CustomerDao {
public Customerbao(){
    System.out.print("CustomerDao constructor called ");
}
}
package com.test
 @SpringBootApplication
public class DemoSpringBootApplication {
    public static void main(String[] args) {
            SpringApplication.run(DemoSpringBootApplication, class, args);
        }
}
```

- • CustomerService constructor called CustomerDao constructor called//Ans
- • CustomerDao constructor called CustomerService constructor called
- • Exception is Thrown at Runtime
- • Nothing will be displayed in console.

9. Given the below code:
```
@RestController
@RequestMapping("/friendsfamily")
public class FriendsFamilyController
```

```
{
     @GetMapping("/(phoneNumber)")
      public Friends FamilyDTO getFriendsFamily(){
     //code to search for Friends Family based on the phone number and return the same
   }
}
```
Choose the correct line of code that should occupy the parameter section of the request method.

- @PathParam("phoneNumber") long phoneNumber

- @RequestParam("phoneNumber") long phone Number

- @PathVariable("phoneNumber") long phoneNumber//Ans

- @RequestBody("phoneNumber") long phoneNumber

10. Which of the following are true regarding the below Spring controller?
```
@RestController
public class OwnerController {
     @RequestMapping(value = "/owner/ownerId)", method = RequestMethod. POST)
     @ResponseBody
     public Owner findOwner(@PathVariable("ownerId") int ownerId) {
     return new Owner();
  }
}
```

- RequestMethod.GET method is more accurate than POST

- @PathVariable should be replaced with the @PathParam annotation

- @ResponseBody could be removed//Ans

- Returning the 201 HTTP status code is better//Ans

11. For the code given below, choose the equivalent option.
```
package com.foo
@Configuration
public class AcmeConfig (
@Bean
 public AcmeService acmeService() {
    return new AcmeServiceImpl();
```

```
    }
}
```

        (A)
            <beans>
                <bean id="acmeConfig" class="com.AcmeService"/> </beans>
        (B)
        <beans>
        <bean id="acmeService" class="com.AcmeServiceImpl"/>
        </beans>
        (C)
        <beans>
        <bean id="acmeConfig" class="AcmeServiceImpl"/>
        </beans>
        (D)
        <beans>
        <bean id="acmeConfig" className="com.foo.AcmeServiceImpl"/>
        </beans>
        (E)//Ans
        <beans>
        <bean id="acmeService" class="com.foo.AcmeServiceImpl"/>
        <beans>

12) Given the below code:

```
@Component("user")
public class User
{
     @Value ("100")
      private int id;
     //@Value("John")
     @Value("#{'John'.toUpperCase())}")
      private String firstName;
      @Value ("Doe")
     private String lastName;
     @Value("#{user.firstName.concat (' ') .concat(user.lastName)}")
      private String fullName;
     @Value ("#{hobbies['1']}")
     private String hobby;
     @Value("#{400 > 300 || 150<100}") // true
      private boolean flag:
// Getter Setter methods
}
Config.xml:
<util:list list-class="java.util.ArrayList" id="hobbies">
```

```xml
        <value>Singing</value>
         <value>Dancing</value>
         <value>Reading</value>
</util:list>
```
What will be the output of these fields when printed?
- id=100 fullName JOHN DOE, hobby-Dancing, flag=false
- id=100. fullName JOHN Doe, hobby Singing, flag-true
- id=100, fullName JOHN Doe, hobby-Dancing, flag=true//Ans
- id=100 fullName JOHN Doe, hobby-Singing, flag-false

13) Given the following configuration class, Choose the correct statements.
```java
    public class ApplicationConfig {
        private DataSource dataSource;
        @Autowired
     public ApplicationConfig(DataSource datasource) {
    this.dataSource = dataSource;
}
@Bean (name="clientRepository")
ClientRepository jpaClientRepository() {
return new JpaClientRepository();
  }
}
```

- @Configuration annotation is missing//Ans

- @Bean scope is prototype

- @Bean name is ambiguous

- Default or no-arg constructor is missing//Ans

(14) Consider Mobile Service class with two properties mobile Number and model as shown below.
```java
package com.spring;
public class MobileService{
        private long mobileNumber;
        private String model;
//default constructor
//getter & setters
}
```
config.xml:
```xml
<bean id="mobileService" class="com.spring. MobileService">
```

```
        <constructor-arg value="1234567891"/>
        <constructor-arg value="Nokia"/>
</bean>
```
The main method:
```
ApplicationContext ac-new Class PathXmlApplicationContext ("config.xml");
MobileService m = (MobileService) ac.getBean ("mobileService");
```
What is the error in the above scenario?

- Attribute name is not provided in the constructor-arg tag of bean definition in the configuration file.//Ans
- Compilation Error
- Use of index/type attribute is mandatory in constructor-arg tag
- Use of scope attribute is mandatory in constructor-arg tag.
- Parameterized constructor is not added in the POJO class.

15) What will be the output for the following place of code?

```
//The Junit files are imported public class TestClass{

@Text
public void testingMethod () {
String message ="Test" ;
assertequals(3, message.Length());
}
}
```

1: Compilation Error

2: Runtime Error

3: Test Ran with Success

4: Test Ran with failure// Ans

(16) Considering the following handler method definition:

```
@RequestMapping(values="/showUser", method =RequestMethod.Get)
 public string show (@RequestParam("userId") Long id, Model model) {
...
}
```


Which of the following requests are mapped to it?

- http://localhost:8080/mvc-basic/showUser?userid=105//Ans
- http://localhost:8080/mvc-basic/showUser?id=105
- http://localhost:8080/mvc-basic/User?id=105
- http://localhost:8080/mvc-basic/showUser?userid=2c

17) Assume that we have two entity classes created for validating the Citizen's voter details. As per the rules, a citizen is supposed to have only one voter identity with him. Which among the following mappings are true with respect to One to One Mapping?

O (A)
```
@Entity @Table (name "Citizen")
 public class Citizen
{
@Id private int citizenId;
private String citizenName;
@OneToOne (cascade CascadeType.ALL)
@JoinColumn (name="citizenVoterId")
private Voter citizenVoter;
 //getter and setters
}
@Entity @Table(name = "Voter")
 public class Voter
{
@Id private int citizenVoterId;
 private String location;
//getters and setters
}
```
O (B)
```
@Entity @Table (name "Citizen")
public class Citizen
{
@Id private int citizen Id;
private String citizenName;
 @OneToOne (cascade CascadeType. ALL)
private Voter citizenVoter;
//getters and setters
}
@Entity @Table (name = "Voter")
Public class voter
{
@Id@JoinColumn(name="citizenvoterId")
 private int citizenVoterId;
```

```
private String location;
//getters and setter
}
O (C)
@Entity @Table (name "Citizen")
 public class Citizen
{
@Id private int citizenId;
 private String citizenName;
 @OneOne(cascade = CascadeType. ALL)
@JoinedColumn (name="citizenVoterId")
 private Voter citizenVoter;
//getters and setters
}
@Entity @Table(name = "Voter")
Public class voter
{
@Id private int citizenVoterId;
 private String location;
//getters and setters
}
O (D)//Ans
@Entity @Table (name = "Citizen")
public class Citizen
{
 @Id private int citizen Id;
private String citizenName;
@OneToOne (cascade = CascadeType.ALL)
 @JoinColumn (name="citizenVoterId", unique = true)
private Voter citizenVoter;
//getters and setters
}
@Entity @Table (name= "Voter")
 public class Voter
{
@Id private int citizenVoterId;
 private String location;
//getters and setters
}
```

D(18) High Tech Solutions team uses Spring JDBC for performing database operations to the User entity. The User class is designed as below:

```
    public class User{
            private Integer userId;
```

```
        private String username;
        private String userUnit;
}
```
The team needs to retrieve all the user records. Assume that the jdbcTemplate is an instance of JdbcTemplate object.

Which among the following Spring JDBC template code is a valid option to fetch the records?

O (A)
```
public List<User> getUser(){
            String sql = "select userId, userName userUnit from User";
return jdbcTemplate.query (sql, new RowMapper User >() {
public User mapRow (ResultSet ra, int rowNum) throws SQLException {
User user = new User();
//values fetched from rs and set to the User object
return user;
  }
 });
}
```

O (B)
```
public List<user> getAll() {
   String sql = "select userId, username, userUnit from User ";
   return jdbc Template.queryForobject(sql, new RowMapper< User>(){
       public User mapRow (ResultSet rs, int rowNum)
            throws SQLException{
       User user =new User ();
      //values fetched from rs and set the User object
     return user;
   }
 });
}
```

O (C)
```
public List<User> getAll() {
        String sql = "select userId, user Name, userUnit from User " ;
return jdbcTemplate.query(sql, User.class);
}
```

O (D)
```
public List<User> getAll() {
            String sql = "select u.userId, u.userName, u.userUnit from User u";
            return jdbcTemplate.executeQuery (sql, User.class);
}
```

O (E)//ans
```
public List<User> getAll() {
      String sql = "select userId, userName, userUnit from User ";
      return jdbcTemplate.query (sql, new RowMapper User > () {
          public User mapRow (ResultSet rs, int rowNum)
```

```
           throws SQLException {
        User user = new User ();
//values fetched from rs and set to the User object
return user;
     }
  });
}
```

(19):
Consider the following Spring bean and configuration class:

```
package com.test.service;
public class BikeServiceImpl ({
      public BikeServiceImpl() {
      System.out.println("Registration in progress...");
    }
     public void showStatus () {
         System.out.println("Registered");
    }
}
package com.test.configuration;
@Configuration
public class SpringConfig {
    @Bean
     public BikeServiceImpl myRegistration () {
       return new BikeServiceImpl();
    }
  }
```

What is the output when the following code is executed?

```
package com.test;
public class Tester{
public static void main(String[] args) {
AbstractApplicationContext ctx = new AnnotationConfigApplicationContext(SpringConfig.class);
BikeServiceImpl bikeService = (BikeServiceImpl) ctx.getBean("myregistration");
bikeService.showStatus();
ctx.close();
  }
}
```
A.Registration in progress... Registered//Ans

B.Registered
C.Registered Registration in progress
D.The code will throw RuntimeException exception

20) Assume you have a table in your database called Car which maps to a Car class in your Java application. There is a member variable in your class called "make" representing the brand/manufacturer of a car. There is also a "type" variable conveying whether the car is a sedan, SUV, hatchback etc. You have also set up a CrudRepository for the Car entity Let's say you wish to perform a search such as "give me all cars of brand myBrand of type hatchback. Which of these is a method which you can set up in the CrudRepository to enable such a search?

O(A)

List<Car> findByMakePlusType (String make, String type);

(B)

List<Car> findByMake (String make);

(C)//Ans

List<Car> findByMakeAndType(String make, String type);

 (D)

Car findByMakeAndType();

(21): Assume that the @Transactional annotation support is enabled appropiately with Spring configuration.

What is the behavior of the following code sample?

```
public class EmployesServiceImpl {
     ----------------------
@Transactional
public void updateEmployee (int empId, String baseLocation)
{
  Employee employee =getEmployee (employee.getEmpId());
--------------------
}
@Transactional (propagation=Propagation.REQUIRES_NEW)
public Employee getEmployee (int empId) {
     // IMPLEMENTATION
 }
```

}

- The getEmployee() method executes code in a new transaction//Ans

- The getEmployee() method executes in the transaction scope of updateEmployee() method

- Spring does not allow overriding the default values of @Transactional annotation

- The getEmployee() method executes in non-transaction scope

(22):-
Please refer below
Consider the class given below
  package com.test.eervice;
  public class BookService {
        private List<BookRepository> bookRepositories;
         //constructors
         //setter and getter methods
}
Choose the Correct statements.

- (A)//ANS

Assume bookRepositoryl and bookRepository2 bean definitions are available
<bean id="bookService" class="com.test.service.BookService">
<property name="bookRepositories">
<list>
    <ref bean= "bookRepository1" />
    <ref bean= "bookRepository2" />
 </list>
</property>
</bean>

- (B)

Assume BookRepository is present in com.test.repository package
<bean id="bookService" class="com.test.service BookServices">
<property name="bookRepositories">
<list>
 <bean id="bookRepository!" property "con.test.repository BookRepository/>
 <bean id="bookRepository2 property = com.test.repository. BookRepository/>
</list>

```
</property>
</bean>
    ▪ (C)
```
Spring provides support for the collection types such as List, Set but not Map.
```
    ▪ (D)
```
Spring does not support collection in the bean definition..
```
    ▪ (E)//Ans
```
Assume BookRepository is present in com. test.repository package
```
<bean id="bookService" class="com.test.service.BookService">
<property name="bookRepositories">
<list>
<bean id="bookRepository1" class="com.test.repository. BookRepository/>
<bean id="bookRepository2" class="com.test.repository.BookRepository/>
</list>
</property>
</bean>
    ▪ (F)//Ans
```
Spring provides support for all the collection types such as List, Set, Map

D(23:
A Spring application includes the following class definitions:

```
package com.test.services
public class EmployeeService{
        private int empino;
        private String name;
        @Autowired
        private Address Service office;
     //getter and natter thods for all properties)
package com.test.service;
public class Address Service {
    String city:
    String street;
//getter and setter methods for all properties)
config.xml:
<context:annotation-config />
<bean id="emp" class="com.test.service.EmployeeService">
     <property name="empno" value="1001"/>
      <property name="ename" value="John"/>
</bean>
```
Main method:
```
ApplicationContext context = new Class PathXml ApplicationContext("config.xml");
Employee Service emp = (Employee Service) context.getBean ("emp");
```
What will happen if the main method of this application is executed?

- Employee Service bean will be created with a null AddressService reference//ANs

- Employee Service bean will be created which references an AddressService object with the value of city and street as null

- A Runtime Exception will be thrown

- CompileTime Error as @Autowired cannot be applied on AddressService attribute

24:single answer
The TechData core team works on a project based on Spring Boot application development with JPA integration for ORM support. The team uses a class called DataUserDACImpl to define the EntityManager instance, this class implements the DataUserDAO interface. The specification mentions that the Entity Manager created should be maintained by the container and there should not be any developer's side efforts to manage the Entity Manager. Help the team identify which among the following can be a valid option to achieve this?

O (A)//Ans

```
public class DataUserDAOImpl implements DataUserDAO
{
@PersistenceContext
private EntityManager entityManager;
//Defining required methods to perform database operations
}
(B)
public class DataUserDAOImpl implements DataUserDAO
{
@PersistenceUnit private EntityManager entityManager;
//Defining required methods to perform database operations
}
(C)
public class DataUserDMOImpl
{
@PersistenceContext
 private EntityManager entityManager;

//Defining required methods to perform database operations
```

(D)
```
public class DatauserDMOImpl
{
@Persistenceunit
 private EntityManager entityManager;

//Defining required methods to perform database operations
}
```

25:
Hale Tech team uses a Spring-based application to maintain their user details. The team has implemented a backend using the CRUDRepository of Spring Data commons. The HaleUser class is an entity class that is mapped to the table in the relational schema. The class is designed as shown below

```
@Entity
 public class HaleUser{
      @Id
       private Integer haleUserId;
       private String haleUserName;
//getters and setters
}
```
Help the team identify which among the following are valid methods supported by Spring?

- findAll()//ANS

- findById(Integer haleUserId)//Ans

- save(Integer haleUserId)

- deleteById(Integer haleUserId)//Ans

(26).
```
1.package com.mphasis;
2. import javax.persistence.Entity;
3. import javax.persistence.GeneratedValue;
4. import javax.persistence.GenerationType;
5. import javax.persistence.Id;
6. // code goes here
7. public class Customer {
```

8. // code goes here
9.// code goes here
10. private Long id;
11. private String firstName;
12. private String lastName;
// Setters and Getters
}
Which of the following lines of code when added to Lines 6, 8, and 9 will enable mapping of the Java class with the database using JPA where the id field is managed by JPA during generation of records?

- (A)

6. @Table
8. @Id
9. @GeneratedValue (strategy-GenerationType,AUTO)

- (B)//Ans

6. @Entity
8. @Id
9.@GeneratedValue (strategy-GenerationType, AUTO)

- (C)

6. @Table
8. @Identity
9. @Generated Value (strategy-GenerationType ,AUTO)

- (D)

6. @Table
8. @Id
9. @AutoGenerated (strategy-GenerationType,AUTO)

27:
For the code given below, choose the equivalent option
package com. foo;
@Configuration
public class AcmaConfig{
    @Bean
    public AcmeService emaService() {
    return new AmaServiceImpl() ;
    }
}
O (A)
<Beans>
<bean id="ameConfig" class"com. Acmeservice"/> </beans>
(B)
<beans>
<bean id=" acmeservice" class"com .AcmeserviceImp1"/>
 </beans>

(C)
<beans>
<bean id=acmeConfig" class="AcmeServiceImpl"/>
</beans>
(D)
<beans>
<bean id= acmeConfig" className"com. foo AcmeServiceImpl"/>
</bean>
(E)//Ans
<beans>
<bean I'd=acmeservice class"com foo .AcmeserviceImpl"/>
</beans>
28:

 What is true about the following @Entity association between House and Window?
@Entity
public class Window {
@Id
private int winNo;
@ManyToOne
private House aHouse;
@Entity
public class House {
@Id
private int houseNo;
@OneToMany(mappedBy="aHouse")
private List windows;
}

- It's One ToMany unidirectional association

- It's One ToMany bidirectional association //Ans

- The association owner is the House class

- The association owner is the Window class //Ans

29:
Consider the GreetingService class given below:
package com.test.service;
public class GreetingService {
private String greeting;
public String getGreeting() {
return greeting;
}
public void setGreeting(String greeting) {

this greeting = greeting;
}
A Spring configuration file(config ml) defining bean of the GreetingService class is show below
<bean id = "greetingService" class = "com test service. Greeting Service" />
The main method of the application includes the following statements:
ApplicationContext context = new ClassPathXmlApplicationContext("config.xml");
Greeting Service greetingService = (Greeting Service) context. getBean("greeting Service");
greetingService.setGreeting("Hi, Welcome to Spring Course!!");
System.out. printIn(greeting Service. getGreeting());
WebCam
What will happen when we execute the above main method?

Options

- Displays the greeting message "Hi, Welcome to Spring Course!!" //Answer

- Displays null as the greeting property is not initialized

- POJO class setter method cannot be invoked on the bean

- RunTime Exception

30:
  Consider the following code snippet. Which of the following option gives the order in which the methods in the given OutputTest class is executed?

```
import org.junit.*;
import static org junit.Assert.*;
import java.io. *.
public class OutputTest {
private File output;
@Before
public void createOutputFile() {
output = new File(...);
}
@After
public void deleteOutputFile() {
output.delete();
}
@Test
public void testSomethingWithFile() {
```

Options

- createOutputFile() deleteOutputFile() testSomethingWithFile()

- createOutputFile() testSomethingWithFile() deleteOutputFile()//Answer

- testSomethingWithFile() createOutputFile() deleteOutputFile()

- deleteOutputFile() createOutputFile() testSomething WithFile()

31. Observe the following controller. (Assume necessary Imports are done.)

@RestController

@RequestMapping("/plans")
public class PlanController
{
public List<PlanDTO getPlans (@RequestParam("localRate") int localmate,
@RequestParam("nationalRats") int nationalRate){

//code to search for Plans based on local and national rates and return the same
}
Choose the right way of applying method mapping annotation for this controller method from the following.
O (A)
@GetMapping("/{localRate)/(nationalRate)")//Ans
O (B)
@GetMapping (produces="application/json", consumes="application/json")
O (C)
@GetMapping
O (D)
@GetMapping("/(localRate)")

32:
Analyze the following code snippet:

```
@Service
@Transactional(readonly= true, propagation Propagation.REQUIRED)
public class UserServiceImpl implements UserService {
            @Transactional (propagation = Propagation.REQUIRES_NEW)
            @Override
public User findById(Long id) {
return userRepo.findById(id);
  }
}
```
What can be said about the findById() method?

- The method is executed in an existing transaction

- When a method is executed, an exception will be thrown because the transaction is not declared as readOnly

- The method is executed in a new transaction//Ans

- The method is executed in a new transaction by terminating the outer transaction

D(33):
Given the below code. (Assume necessary imports are done.)

```
@RestController
@RequestMapping("/friendsfamily")
public class FriendsFamilyController{
        @PostMapping (produces="application/json",consumes="application/json")
         public Friends FamilyDTO addFriendsFamily(@RequestBody FriendsFamilyDTO
friendsFamilyDto)
{
//code to add friends family and return the same back
}
```
Identify the things that are optional from the following.
a. @RequestBody
b. produces="application/json"
c. consumes"application/json"

- Only a
- Only b and c//Ans
- Only a and c
- A,b,c

34:
```
@Rest Controller
public class ApiController {
  // code goes here
@RequestMapping("/")
public String index() {
loggar.debug("A DEBUG Message");
// code goes hare
return "Display set-up for logging configuration.";
  }
}
```

Which of the following line of code must be added at Line 3and Line 7 to log the message
(A)//ANS
Logger logger LoggerFactory.getLogger(ApiController.class); logger.info("An INFO Message");
(B)
Logger logger LoggerFactory.getLogger:
 logger.info("An INFO Message");
o (C)
Logger logger = new LoggerFactory (ApiController.class);
 logger.info("An INFO Message");
(D)
Logger logger =LoggerFactory.getLogger (SpringBootApplication.class);
logger.info("An INFO Message");

(35):
In Spring MVC which of the following are valid as per the use of @PathVariable annotation?

- (A)
```
@requestMapping(value="/users/(userId)")
public String viewUser(@PathVariable("users") String user, Model m)
```
- (B)
```
@RequestMapping(value="/users/(userId)/addresses")
public String viewUserAddress (@PathVariable String userId, @PathVariable String addressId, Modal m)
```
- (C)//ANs
```
@RequestMapping(value="/users/(userId)")
public String viewUser(@PathVariable("userId") String personnelId, Model m)
```
- (D)//Ans
```
@RequestMapping(value="/users/(userId)")
public String viewUser(@PathVariable String userId, Model m)
```
- (E)//ANS
```
@RequestMapping(value="/users/(userId)/addresses/(addressId)")
public String viewUserAddress(@PathVariable String userId, @PathVariable String addressId, Model m)
```

36:
Given the code below:
```
@Entity
public class Employee {
        @ManyToone
        @JoinColumn (name="dept id")
        private Department dept;
}
```
how do I retrieve employees who belong to particular department?
O (A)
"select from Employees e where e.dept=?1"
O (B)
"select e from Employees e where e.dept_ id=?1"
O (C)//Ans
"select e from Employees e where e.dept. id= ?1"
(D)
"select e from Employees e where e. deptartment_id=?1"

D(37):
Given the below code
```
public interface CustomerRepository extends Jpallepository<user, Long>
{
    // code goes hare
    Collection<User> FindAllActiveUsers(); // complete this line
}
```

Which of the following options will allow users to get a list of all active users and sort them by name?
use following query to get the list of active users with JPA.
"SELECT * FROM USERS u WHERE u.status =1"

- (A)

@Query (value ="SELECT* FROM USERS WHERE u.status = 1", nativeQuery =true)
Collection<User> findAllActiveUsers (Sort. by (Sort. Direction.ASC, "name"));

- (B)

@nativeQuery(value ="SELECT* FROM USERS WHERE u.status=1", nativeQuery=true)
Collection<User> findAllActiveUsers (Sort.by(Sort. Direction.ASC, "name"));

- (C)

@Query (value="SELECT *FROM USERS u WHERE u.status =1", nativeQuery=true)
Collection<User> findAllActiveUsers().sort("name");

- (D)//Ans

@Query (value = "SELECT *FROM USERS u WHERE u.status =1")
 Collection<User> findAllActiveUsers (Sort.by (Sort. Direction. ASC));

38):
Please refer below
TechDataStore team uses Spring JDBC to perform database operations. The TechDataUser class is designed as shown
public class TechDataUser{
        private Integer techDataUserId;
        private String techDataUserName;
         private String techDataUserDept;
}
The team needs to delete a TechDataUser record based on the techDataUserId.
Assume that the jdbcTemplate is an instance of a JdbcTemplate object. Which among the following Spring JDBC Template code is avalid option to delete the record?
O(A)
        public int delete(int techDataUserid) {
return jdbcTemplate.remove("delete from TechDataUser where techDataUserId= ?",
techDataUserid);
}
(B)//Ans
public int delete(int techDataUserid) {
return jdbcTemplate.update("delete from TechDataUser where techDataUserId= ?",
techDataUserid);
}
(c)
public int delete (int techDataUserid) {

```
return jdbcTemplate.delete("delete from TechDataUser where techDataUserId= ?",
techDataUserid);
}
O(D)
public int delete (int techDataUserid) {
return jdbcTemplate.query("delete from TechDataUser where techDataUserId= ?",
techDataUserid);
}
```

(39:

```
 //import statements
@Component
@Configuration
@SpringBootApplication (scanBasePackages ="com.mphasis.irs")
public class IrsApplication
{
public static void main(String[] args){
ApplicationContext context =SpringApplication.run(Irsapplication.class, args);
Employeeservice employeeService =(EmployeeService)context.getBean
("employeeservice");
}
```

Select the correct options.

- Component annotation is not required //ans
- Configuration annotation is not required //ans
- ScanBasePackages atribute of @SpringBootApplication is not required as there are no other base packages other than "com.mphasis.irs"
- Explicit casting to Employee Service is not required as it is taken care by Spring Boot automatically//Ans

(40):
 Which of the following is a valid xml file to register HelloWorld class with property message as a bean in xml?

   (A)
```
<?xml version "1.0" encoding "UTF-8"?>
<beans xmlns="htp://www.springframework.org/schema/beans"
xmlns:xsi="htp://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="htp://www.springframework.org/schema/beans
htp://www.springframework.org/schema/beans/spring-beans-3.0.xsd">
    bean id= "helloWorld" type="com.example. HelloWorld">
```

```
<property name ="message" value="Hello World!"/>
</bean>
    </beans>
    (B)
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="htp://www.springframework.org/schema/beans"
xmlns:xsi="htp://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="htp://www.springframework.org/schema/beans
htp://www.springframework.org/schema/beans/spring-beans-3.0.xsd">
<bean name "helloWorld" class="com.example.HelloWorld">
<property name="message" value="Hello World!" />
</bean>
    beans>
    (C)//Ans
<?xml version "1.0" encoding="UTF-8"?>
<beans xmlns="htp://www.springframework.org/schema/beans"
xmlns:xsi="htp://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="htp://www.springframework.org/schema/beans
htp://www.springframework.org/schema/beans/spring-beans-3.0.xsd">
<bean id "helloWorld" class="com.example.HelloWorld">
<property name="message" value="Hello World!"/>
</bean>
    </beans>


    (D)
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="htp://www.springframework.org/schema/beans"
xmlns:xsi="htp://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="htp://www.springframework.org/schema/beans
htp://www.springframework.org/schema/beans/spring-beans-3.0.xsd">
bean name "helloWorld" type = "com.example. HelloWorld">
<property name="message" value= "Hello World!" />
</bean>
    </beans>
```
41:
Assume that the @Transactional annotation support is enabled appropriately
with Spring configuration

What is the behaviour of the following code sample?

```
public class EmployeeServiceImpl{
--------------
@Transac onal
public void updateEmployee(int empId,String baseLoca on){
Employee employee=getEmployee(employee.getEmpId());
----------------
}
@Transactional(propagation=Propagation.REQUIRES_NEW)
public Employee getEmployee(int empId){
//IMPLEMENTATION
}
}
```

- The getEmployee()method executes code in a new transaction. //Ans
- The getEmployee()method executes code in a the transaction scope of updateEmployee() method.
- Spring does not allow overriding the default values of @Transactional annotation.
- The getEmployee()method executes code in a non transaction scope.
-

42:

Review the following schema:
User Table
userId:primary key
joinedCourses:Many-to-many relationship
Courses Table
courseId: primary key
associatedUsers:Many-to-many relationship
write the code for mapping this relationship

user.java //CODE FOR -A,D
@Entity
public class User {
@Id
private int userId;
@ManyToMany
@JoinTable(

```java
        name="User_Courses",
        joinColumns=@JoinColumn(name="userId"),
        inverseJoinColumns=@JoinColumn(name="courseId")
)
private List<Course> joinedCourses;
}
```
----
course.java
```java
@Entity
public class Course {
@Id
private int courseId;
@ManyToMany(mappedBy="joinedCourses")
private List<User> associatedUsers;
```

43:

FoxTravels maintains two classes DrivingLicense and Citizen.They have one to one relationship between them.Assume that these two classes are annoted correctly with CascadeType.ALL and there are no records currently available in the database
What will be the output of the code given below?
```java
DrivingLicense d1=new DrivingLicense();
d1.setLicenseNumber(101);
Calendar issueDate=Calendar.getInstance();
issueDate.set(12,12,2005);
Calendar expiry=Calendar.getInstance();
expiry.set(12,12,2005);
d1.setLicenseIssued(issueDate);
d1.setLicenseExpiry(expiry);
d1.setVechileType("LMV")
Citizen citizn=new Citizen();
citzn.setcustId(5001);
citzn.setcustName("Ram");
citzn.setDrivingLicense(d1);
session.getTransaction().begin();
session.persist(citzn);
session.getTransactaion().commit();
```

- **One record will be inserted in Driving License Table and one record will be inserted in Citizen Table //Ans**

44:Assume you have a table in your database called Car which maps to a Car class in your Java application. There is a member variable in your class called "make" representing the brand/manufacturer of a car You have also set up a CrudRepository for the Car entity Which represents a method in the CrudRepository which can be used to retrieve all Car instances of a specific make?

(A)
List<Car> select WhereMake(String make):

(B)
List<Car> findByMake(String make)//Ans

(C)
List<Car> findById(String make):

(D)
List<Car> selectFromCarWhereMake(String nake):

46:
Consider a class "MyDataApplicant" with the properties given below

public class MyDataApplicant

//Id field

private String applicantId:

private String applicantifane:

//getters and setters

Assumptions:

-MyDataApplicant table exists in the database with the above properties - jdbcTemplate is an instance of JdbcTemplats class

Which is a proper Spring JdbcTemplate code from the options given below to fetch the total number of applicants who have submitted their requests to the organization?

O (A)
String sql = "SELECT count(*) FROM MyDataApplicant int count jdbcTemplate.queryForObject (sql, String class):
(B)
String sql "SELECT count(*) FROM MyDataApplicant"; int count jdbcTemplate.queryforobject (sql);
(C)
String sql "SELECT count(*) FROM MyDataApplicant; int count jdbcTemplate quaryForObject (sql, Integer class)://Ans
(D)
String sa "SELECT FROM MyDataApplicant int count jdbcTemplate queryforobject (sql, Integer class)

46:
Assume you have a table in your database called Car which maps to a Car class in your Java application. There is a member variable in your class called "bhp" representing the maximum horsepower generated by the car's engine. Which represents a method signature in a Crud Repository which will return all cars whose engines can generate more than a specified horsepower, and ordered in the descending order of BHP?

O (A)
List<Car> findByBhpGreater ThanSortByBhpDesc (int horsepower);
O (B)
List<Car> findByBhpGreater ThanOrderByBhp (int horsepower);
(C)
List<Car> findByBhpGreater Than (int horsepower):
(D)
List<Car> findByBhpGreater erThanOrderByBhpDesc (int horsepower)://Ans
45:

What Java Spring Rest command would retrieve data from a Restful API using RestTemplate? An object called resttemplate has been created from the Rest class

O (A)
resttemplate.retrieveRest ("http://restwebsite", String.class, quota)

(B)
resttemplate.retrieveObject (String.class, "http://restwebsite")

O (C)
resttemplate.getRestObject (String.class, "http://restwebsite")

(D)
resttemplate.getForObject ("http://restwebsite", String.class)//Ans

46:
Consider the code given below:

public interface MusicianDAO{

//CRUD methods

}

public class MusicianDAOImpl extends MusicianDAO {

//Implements CRUD operations using Spring JdbcTemplate

Which among the following is a valid annotation to be used at the class level to translate checked exceptions to unchecked exceptions by eliminating the need for an explicit try-catch block in the repository code?

- @Component

- **@Repository//Ans**

- O@ExceptionHandler(value = Exception.class)

- @Configuration

47:
Consider the following classes defined in a Spring application:

package com.demo.company;

public class Address

private String city;

private String pincode;

public Address ()

//getter and setter methods)

package com.demo.company;

public class Employee {

private Address address;

//getter and setter methods)

Config.xml:

<bean id="address" class="com.demo.company.Address">

<property name="city" value="Los Angles"/> <property name="pincode" value="91167"/>

</bean>

<bean id="employee" class="com.demo.company. Employee" autowire="byName" />

Main class:

ApplicationContext ac= new ClassPathXmlApplicationContext("config.xml");

Employee el = (Employee) ac.getBean ("employee");

System.out.println("City: "+el.getAddress().getCity ()+" Street: "tel.getAddress().getPincode());

What is the output of the above code execution?

- Throws NullPointerException

- Display city as "Los Angles" and pincode as null

- Display city and pincode as null

- No bean named 'address' available

- **Display city as "Los Angles" and pincode as "91167"**

48:
Assume that a LibraryRepository must be created for the given Library class. Which of the following is the correct way of coding? (Assume all the import statements are provided correctly)

```
@Entity
public class Library {
@Id
private String libraryId;
private String libraryName:
}
(A)
public interface LibraryRepository extends JpaRepository<Library, Integer> {
}
(B)//ANS
public interface LibraryRepository extends JpaRepository< Library, String> {
}
```

(C)
```
public interface LibraryRepository extends JpaRepository<String> {
}
```
(D)
```
public interface LibraryRepository extends JpaRepository<Library> {
}
```

50:
An application EsayRider is added with the Employ Persistence module recently that works for persisting employee details. Some of the code snippets Trom the newly added module are given below for your observation
```
//import statements
@SpringBootApplication (scanBasePackages "com.mphasis.irs"}
public class IrsApplication
{
public static void main(String[] args) throws Exception
{
ApplicationContext context = SpringApplication.run(IrsApplication.class, args):
Employee Service employeeService = (Employee Service) context.getBean
("employeeService"); System.out.println(employeeService.persistEmployee());
}
}
//import statements
public class Employee Service{
public String persistEmployee() {
//call to employee repository is made
return "employee persisted successfully";
}
}
```
As you observe, NoSuchBeanDefinitionException will be thrown at run-time because of Employee Service class.
Identify the option that shall make the code work.
- Annotate Employee Service class either with @Component or @Service annotation//Ans
- Annotate Employee Service class with @Configuration annotation
- Annotate Employee Service class with @ComponentScan annotation

- Annotate Employee Service class with @ComponentScan annotation @Bean

Which of the following is not a Kibana visualization option for time-based data?

Option b

Timelion

Vega

Line chart

Geo heatmap

Choose the correct Syntax to disable the test using the TestNG @Test enable parame

Option c

@Tyst(enable=false)

@Test(enable=false}

@Test(enabled=false)

@Test(enabled=false}

----------helps to gain powerful insights about data.

Elasticsearch

Kibana

Logstash

Beats

Which of the following are features of ELK stack?

Corporate branding

Visualization

Querying

Monetization

Select the benefits of EC2.

Elastic ans

Expensive

Reliable ans

Not flexible

Secure ans

un-controlled

AWS has the concept of a centers. which is a physical location around the world where we

Region

Availability Zone

Edge Location

AWS Local Zones

Which of the following is not an annotation used in TestNG?

@BeforeSuite

@BeforeClass

O@After Test

@AfterException ans

Which of the following command is used to switch between frames?

driver.switch To().frame()

Which Docker command shows the containers in a Swarm that are running on Swarm nodes?

docker service ps

By default_____ of types is enabled in Elasticsearch.

dynamic mapping

which of the following are used to select a drop down?

By value

By Visible Text

By Index

You plan on using the CLI to deploy a Windows EC2 instance. How can you specify that you wal Server 2022 instance?

Specify a Windows Server 2022 AMI id

The default Elasticsearch log level is

info

An_____is where end users access services located at AWS

Edge location

_____is a tool for defining & running multi-container Docker applications

Docker Compose

What will happen if you use the following code in your script?

driver manage().timeouts().setScriptTimeout(-10,ECOND)

Sets the amount of me to wait for an asynchronous script to finish execution before throwing an

Which wait has scope through out the driver instance?

Implicit wait

Point out the correct statements.

B) SimpleDB interoperates with both Amazon EC2 and Amazon S3

d) EC3 is not an Analytics as a Service provider

Which of the following commands can we use to set up a private Docker Hub repository?

docker run -d-p 5000 5000 --restart always -name registry registry:2

_____handles the current window that uniquely identifies it within this driver instance

driver.getWindowHandle();

What is the purpose of Kibana Beats?

To collect and ship data to Elasticsearch

Choose the ways to disable the test cases in TestNG.

B) Disable the test case in a @Test annotation

D) Disable the test case in the XML file.

List some of the features of Kibana.

Data discovery

Dashboard

Ingest data

Which of the following visualizations can be created and managed using Kibana?

Vertical bar

Dashboards

Pie charts

Which environment variables need to be set in the docker-compose yani file?

A) MYSQL ROOT_PASSWORD

d) WORDPRESS_DB_USER

A_____window is a secondary browser window that appears on top of the main brown

 pop-up

What requirements that must be met in order to successfully install Docker Desktop on a Windows 10 Enterpe y

c) Hyper-V backend

d) WSL 2 feature

You need to ensure uploaded files to an S3 bucket are encrypted. What should you do?

Enable encryption in the upload properties section

Which type of storage service is Amazon S3?

O Object

Which CLI command is used to deploy an EC2 instance?

aws ec2 run-instances

Identify the valid commands that we can use to build images from Dock

sudo docker build

Select some of the benefits associated with containerization.

A) With containerization we can create multiples copies on several machines

C) Containerization encapsulates applications

d) Containerized applications can be automatically deployed on on-premise servers

Which of the following are parameters associated with multithread in testng.xml?

c) thread-count

d) parallel

Which of the following are TestNG annotations?

A) @Listeners

c) @AfterGroups

Which AWS storage class is used for long-term archiving?

Glacier

Specify some of the methods that we can use to handle keyboard events

keyDown

sendKeys

You need to view the hostnames of Docker Swarm cluster computers. Which command will achhive this ?

docker node is

Aller applying a Docker Swarm service configuration, you need to run a Linux command in a com wenty the configuration was applied. Which base command should you use?

docker container exec

Which of the following are the features of Docker Swarm?

Cluster management

Decentralized design

Multi-host networking

Which of the following @Test attribute creates dependency in TestNG?

dependOnMethods

dependsOnGroups

dependsOn

which Kubernetes feature automatically scales the number of Pods in a deployment, replica set, or based on specific metrics like observed CPU utilization?

Horizontal Pod Autoscaling

Refer the code below and choose the output of the following code

Actions builder = new Actions (driver);

Action actions builder.moveToElement (addButton).click().build() actions.perform():

⬚ Mouse over on the addButton and click on Element.d

Which data type is returned by the DataProvider method in TestNG?

D) Object[][]

What will be the output for the following code?

public static void main(String[] args) {

int numl = 0;

int num2 = 0;

for (int var = 0; var < 5; var++) {

if

)

numl++;

)

System.out.println(numl + " and " + num2);

((++numl> 2) && (++num2 > 2)) (

5 and 2

8 and 5

6 and 3

Answer: 6 and 3

Identify the issue in the below code fragment.

public class Example

public String formatInput (String i) (if(i.trim().length()==9) (//Line 3 StringBuilder sb = new StringBuilder(); sbsb.insert(0, "+1("); //Line 5 sbsb.insert (6, ")"); //Line 6 absb.insert (10, "-") //Line 7 return sb.toString():

return null;

public static void main(String[] args) (Example obj = new Example(); String i obj formatInput(i);

Compilation Fails at Line 3

Compilation Falls at Line 6

NullPointerException will be thrown if the value of i is null

Compilation Fails at Line 7

StringIndexOutOfBoundsException will be thrown if the length is 9

Answer: CD

What will be the output for the following code?

class Super (

int num 20

public void display() (

System.out.println("super class method");

public class Thialse extends Super int num

public ThisUse (int num) (this. num num

public void display () (System.out.println("display method");

public void Show() (this display(): display() System.out.println(this.num) System.out.println(num)

public static void main(String[] args) { ThisUse o new ThisUse (10) o. Show();

super class method display method 20 20

display method display method 10 10

Odisplay method display method 20 20

súper class method display method 10 10

Answer: B

What t is the default location where your local repository for Maven is stored?

${user.home)/m/repository/

S{user.home}/.m2/repository/

${user.home)/.m/repository/

O&{user.home}/m2/repository/

Answer: B

There are two general uses of plugins. The first is build and the second is

Oreporting

servers

dependencies

distribution management

Answer: A

What defines the Agile Scrum approach?

System that relies on incremental development

System that relies on no development

System that relies on ad hoc development

System that relies on conditional development

Answer: A

Given the code fragment:

Deque<String> queue = new ArrayDeque<String>();

queue add("Susan");

queue add("Allen");

queue. add("David");

System.out.println(queue.pop());

System.out.println(queue, remove());

System.out.println(queue);

What will be the output for the following code?

David David [Susan, Allen

Susan Susan [Susan, Allen]

Susan Allen [David]

David Allen [Susan]

Susan Allen [Susan David]

Answer: C

You want to create a new branch called hotfix. Which command achieves this?

git branch hotfix

git -branch hotfix

git --branch-hotfix

git branch -hotfix

Answer: A

Which of the three framework activities are present in the Adaptive Software Development (ASD)?

requirements gathering, adaptive cycle planning, iterative development

speculation, collaboration, learning

analysis, design, coding

iterative development, coding, design

Answer: B

Which command is used to compare the working directory with staging area?

git status

git add

git init

git diff

Answer:D

What will be the output for the following code?

public class Employee (private String name:

private int empId: private String city

Employee()(

this city = "New York";

Employee(String name, int empId) (this();

this name пале

this.empId = empId:

public static void main(String[] args) (Employee employeel new Employee ("John", 101);

Employee employee2 = new Employee ();

System.out.println(employeel. name+" + employeel.empId+-- + employeel.city):
System.out.println(employee2.name employee2.city); + employee2.empId+

John 101 New York John 101 New York

John 101 null null O New York

John 101 New York nuli 0 New York

John 101 null John 101 New

Answer: C

How should work be allocated to the team in the agile project?

Team members should self-select tasks.

The project leader should give tasks to individuals to create challenges for them.

The biggest tasks should be done by the project leader themselves.

Tasks should be randomly allocated using planning poker.

Answer: A

Given that the current directory is empty, and that the user has read and write permissions, with the following code snippet:

11. import java.io.*;

12. public class DOS

13. public static void main(String[] args) (

14. File dir new File("dir");

15. dir.mkdir();

16. File fl new File(dir, fl.txt");

17. try (

18. fl.createNewFile();

19.) catch (IOException

e) (;) 20. File newDir new File("newDir");

21. dir. renameTo (newDir)

22.)

231

Which statement is true?

Compilation fails.

The file system has a new empty directory named dir.

The file system has a new empty directory named newDir.

The file system has a directory named dir, containing a fi f1.txt.

The file system has a directory named newDir, containing a file f1.txt.

Answer: C

What will be the output for the following code?

class MyGen<T>

private T obj:

public void add (T obj) (

this.obj = obj:

public T get () { return obj:

public class TestGen

public static void main(String[] args) { MyGen<Float>= new MyGen<Float>();

m. add (7.3); // Line 5 m. add (9); // Line 6

System.out.println(m.get()); // Line 7

+ 16 of 44

09

16

Compilation Error in Line 5,6

Answer: C

phase5

1. Which file contains the commands to build a Docker image?

dockerfile

docker-compose.yml//Answer

requirements.txt

app.py

2. Which of the following are valid beats built by elastic team?

• Packetbeat//Answer

• Filebeat//Answer

• Heartbeat//Answer

• Microbeat

3. Amazon S3 stores data as objects within resources called

• Auto Scaling

• EC2 Instances

• Buckets//Answer

• Amazon RDS

4. What are the different types of

   instances?

General purpose//Answer

• Compute Optimized//Answer
Storage Optimized//Answer
Hardware Optimized

 Software Optimized

5. Which file is the main node configuration file for ElasticSearch?

• elasticsearch.yml//Answer

elasticsearch. config

• jvm.options

 log4j2.properties

6. Which WebDriver method should be used to switch the focus to a browser window, a frame, oran alert?

O switch To()//Answer

O setFocus()

O setTo()

O applyFocus()

7. Which of the following annotation will be invoked before the execution of each test method?

• @BeforeMethod//Answer

@BeforeClass

• @Before

• @Before Test

8. Which systems can Beats ship data to?

• Logstash//Answer

Apache

Kibana

• Elastisearch//Answer

9. Which of the following command is used to return all container details?
• docker ps

• docker containers

O docker ps -q

O docker ps -a//Answer

10. Which of the following are the advantages of AWS?

• Flexibility//Answer

• Cost-effectiveness//Answer

• Scalability//Answer

• Portability

11. Select the benefits of EC2.

• Elastic//Answer

• Expensive

• Reliable//Answer

• Not flexible

Secure

• uncontrolled//Answer

12. Select all the distributions used by AWS CloudFront.

• Web//Answer

O FTP

O RTMP//Answer

• SMTP

• POP3

13. Which of the following cannot be used for dropdown selection?
• By value

• By Visible Text

• By Index

• By attribute//Answer

14. Which command is used to show the Docker version information in an easy-to-read layout?

• docker version//Answer

• docker v

• docker details

• docker show version

15. Which of the following is an edge-storage or content-delivery system that caches data in different physical locations?

• Amazon Associates Web Services

• Amazon Relational Database Service

• Amazon CloudFront

• Amazon SimpleDB//Answer

16. Which of the following commands is used to get the details of

Docker?

O docker info//Answer

O docker help

• docker details

O dList

17. Some of the features of Kibana that extend the capability of Kibana dashboards.

• Export dashboards//Answer

• Manage indexes//Answer   (Not Sure)

• Delete visualizations   Being-1,2,3,4

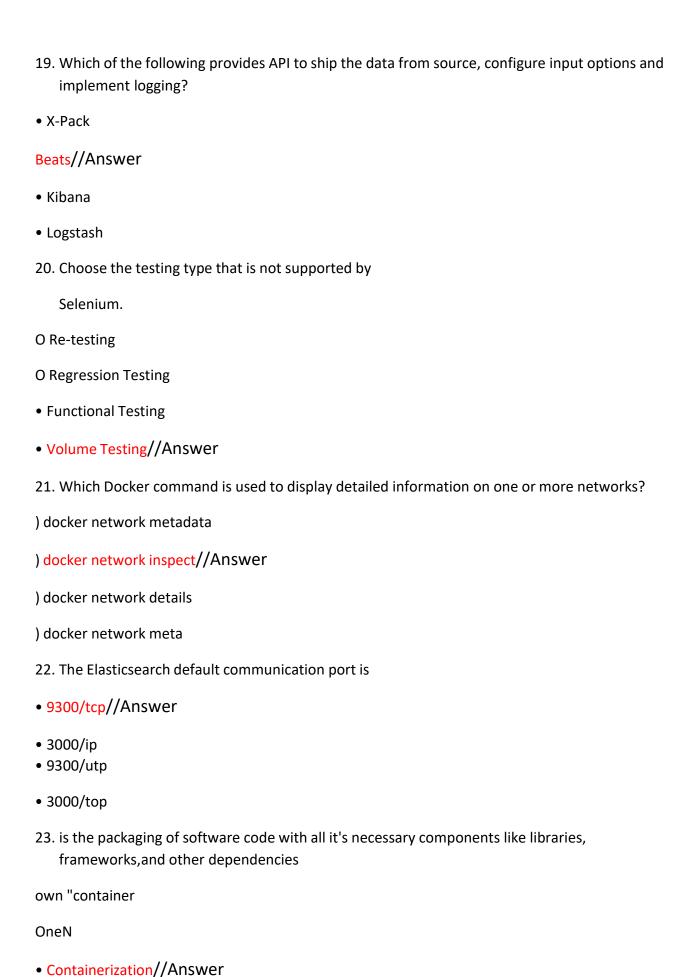Generate PDF reports without using pluginsocker show//Answer

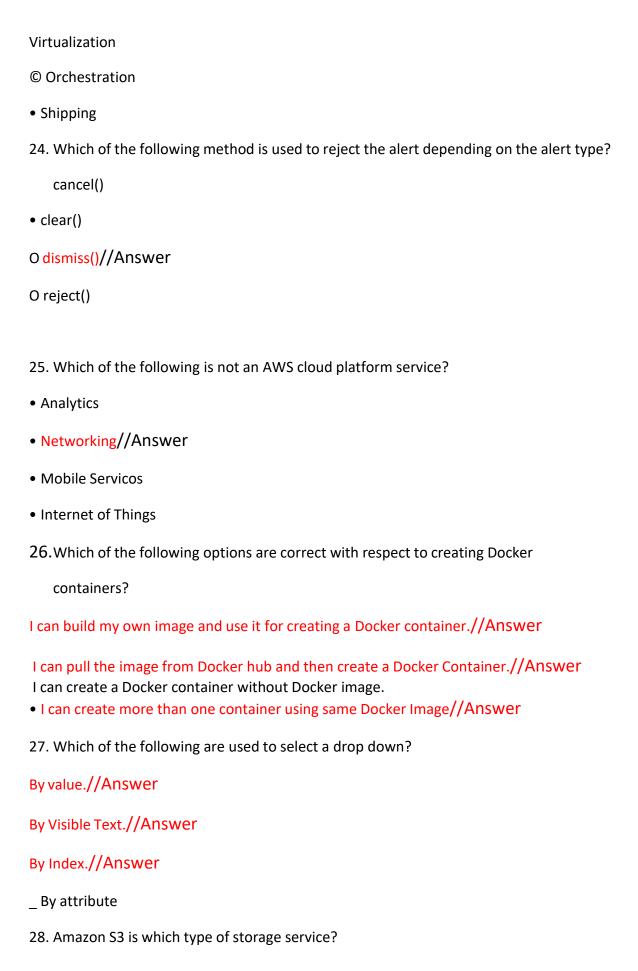18. Which of the following statements are true about Docker

containers?

C Containers are lightweight//Answer

• Fewer resources are used//Answer

Booting of containers is very fast//Answer

More resources are used

19. Which of the following provides API to ship the data from source, configure input options and implement logging?

• X-Pack

Beats//Answer

• Kibana

• Logstash

20. Choose the testing type that is not supported by

Selenium.

O Re-testing

O Regression Testing

• Functional Testing

• Volume Testing//Answer

21. Which Docker command is used to display detailed information on one or more networks?

) docker network metadata

) docker network inspect//Answer

) docker network details

) docker network meta

22. The Elasticsearch default communication port is

• 9300/tcp//Answer

• 3000/ip
• 9300/utp

• 3000/top

23. is the packaging of software code with all it's necessary components like libraries, frameworks,and other dependencies

own "container

OneN

• Containerization//Answer

Virtualization

© Orchestration

• Shipping

24. Which of the following method is used to reject the alert depending on the alert type?

   cancel()

• clear()

O dismiss()//Answer

O reject()

25. Which of the following is not an AWS cloud platform service?

• Analytics

• Networking//Answer

• Mobile Servicos

• Internet of Things

26. Which of the following options are correct with respect to creating Docker

   containers?

I can build my own image and use it for creating a Docker container.//Answer

 I can pull the image from Docker hub and then create a Docker Container.//Answer
 I can create a Docker container without Docker image.
• I can create more than one container using same Docker Image//Answer

27. Which of the following are used to select a drop down?

By value.//Answer

By Visible Text.//Answer

By Index.//Answer

 By attribute

28. Amazon S3 is which type of storage service?

• Block

• Object//Answer

• Simple

• Secure

29. Where does the Docker daemon store the Docker images?

• Docker Client

O Docker Host

O Docker Registry//Answer

• Docker Hub

30. Which of the following visualizations can be created and managed using Kibana?

• Split pane

[Vertical bar//Answer

[Dashboards//Answer

(Pie charts//Answer

31. Which of the following are features of ELK stack?
• Corporate branding

• Visualization//Answer

• Querying//Answer

• Monetization

32. Which of the below are valid commands to refresh browser(driver is instance of WebDriver class)?

] driver.navigate().refresh();//Answer

I driver.switch To().main().refresh();

3 driver.switchTo().main(URL).refresh();

• driver. findElement(By.xpath("//body")) sendKeys(Keys. F5);//Answer

33. Which of the following components adds security, monitoring, alerting, reporting and graph capabilities to Elastic Stack?

O Logstash

• Kibana

O X-Pack//Answer

• beats

34. Select the Get command which fetches the inner text of the element that you specify in Web driver Selenium.

O get in Text()

O getinner Text()//Answer

O getText()

O get inner_ Text()

35. What does the following code snippet do?

Actions act = new Actions (driver); // where driver is WebDriver type

act.move ToElement(WebEiement).perform();

act.contextClick () perform ();

O Drag and Drop

O Left click

O Right click//Answer

O Moves the selection

36. Which of the following statements is wrong about Amazon S3?

) Amazon S3 provides large quantities of reliable storage that is highly protected

) Amazon S3 is highly available//Answer

) Amazon S3 is highly reliable

• Amazon S3 is an object storage service

37. Recall the benefits for automated testing provided by Selenium.

• Runs parallel tests on a single machine//Answer

C Works with all popular programming languages//Answer

- Runs tests under multiple browsers//Answer

- Provides simple to use test management features//Answer

38. Which of the following annotation supports data-driven

festing?

- @DataProvider//Answer

@DataSet

@ Provider

39. Why does the AWS Console show "Global" when working with S3 buckets?

- S3 Bucket names must be globally unique//Answer

- S3 Buckets use the AWS global backbone network for uploads
- S3 Buckets are replicated globally

- S3 Buckets are not tied to a specific region

40. Which of the following are keywords of Docker?

   build

- ship//Answer

- run//Answer

- deploy//Answer

41. A Dockor service named payroll is currently deployed to a two-node swarm. You add an
     additional swarm replica hosted on the new node. Which two methods can achieve this?

C Use - replicas global with the docker service command

 docker service create - - replicas 3 payroll//Answer

- docker service scale payroll1=3//Answer

- Use - - mode global with the docker service command

42. Which of the following request fetches all documents from all indices from the cluster in

Kibana?

O GET / search//Answer

O GET / searchall

O GET / all

O GET / documents

43. What is the return type of driver

getCurrentUri0?

O List

- Character
- String[]
- String//Answer

44. Which environment variables need to be set in the docker-compose yam

file?

O MYSQL ROOT PASSWORD//Answer

- MYSQL DB HOST

- WORDPRESS DB PATH

- WORDPRESS DB USER//Answer

45. Most analysis tools depend upon

- structured data//Answer

- unstructured data

O graph data

- complex data

46. Which one of the following runs on Xen Hypervisor?

- Azure

O AWS EC2//Answer

O AWS EC3

• AWS RDS

47. Which of the following is the correct syntax for implicit wait of 5 Secs (d is the instance of Webdriver)?

O d.manage().timeouts() .implicitlyWait(5, TimeUnit.SECONDS)//Answer

O d.timeouts() .manage ().implicitly Wait(5, TimeUnit SECONDS)

O d.timeouts() implicitly Wait(5, TimeUnit. SECONDS)

• d.timeouts() webDriverWait.implicitlyWait(5, TimeUnit.SECONDS)

48. Which of the following command is used to destroy the instance of WebDriver?

• driver. Quit()//Answer

O driver.close()

• driver.abandon()

• driver.clear()

49. Amazon Web Services falls into which of the following cloud-computing

category?

O Platform as a Service

• Software as a Service

Infrastructure as a Service//Answer

• Back-end as a Service

50. Which axis name is associated with the selection of the parents and grandparents in

selenium?

Auto Next

O Following

• Ancestor//Answer

O Parent

• Preceding

51. ____is a visualization tool for analyzing time-series data and allows executing advanced

mathematical calculations.

• Auto Next

• Dashboard

O DevTools//Answer

• Timelion

• Plugins

52. What is the use of Amazon S3?

Auto Next

• Hosting websites

• Storing and retrieving data//Answer

• Managing servers

O Monitoring application performance

53. Select the method which is used to do drag and drop in actionsClass.

• dragAndDrop(Source, offset)

O dragAndDrop(Xoffset,yOffset)

O dragAndDrop(Source, target)//Answer

• dragandMove To(source, tar

54. Which Docker network treats each container as its own physical network device?

• Overlay

• Ipvlan

• O Host   (gpt)

• Bridge

- Macvlan//Answer   (being)

55. Applications and services that run on a distributed network using virtualized resources is knownas

Auto Next

O Parallel computing

- Soft computing

- Distributed computing

- Cloud computing//Answer

56. Which of the following is a correct relationship between Regions, Availability Zones, and EdgeLocations?

Auto Next

Data centers contain regions.

- Regions contain Availability Zones.

- Availability Zones contain edge locations.//Answer

Edge locations contain regions.

57. Which capability of X-Pack helps to configure fields and document level security?

- Graph

- Reporting

- Alerting

- Security//Answer

58. List some of the Kibana features that enable dashboard reusability.
- Copy/Answer
- Clone/Answer   (gpt-2,3,4)
- Snapshot/Answer   (being-all)

- Share//Answer

59.Which of the following command format the response of request in JSON

format?

O curl -XGET http://localhost:9200/catalog/products/1? pretty true//Answer

• curl -XGET http://localhost:9200/catalog/products/1 ?format-json

O curl -XGET http://localhost:9200/catalog/products/ 1 ?type=json

O curl -XGET http://localhost:9200/catalog/products/1 ?format-type=son

60. What is the purpose of a Kibana index pattern?

• To define how data is mapped to Elasticsearch//Answer

• To create custom visualizations

O To define search queries

O To define index settings

61. Which of the following are features of

Docker?Auto Next

• Docker has the ability to reduce the size of development by providing a smaller footprint of the operating system via containers.//Answer

© With containers, it becomes easier for teams across different units, such as development, QA and Operations to work seamlessly across applications.//Answer

• You can deploy Docker containers anywhere, on any physical and virtual machines and even on the cloud.//Answer

Docker Containers are not easily scalable

62. Which CLI commands can be used to create a new S3 Bucket?

• aws s3api make-bucket

• aws s3 cb

• aws s3api create-bucket//Answer

• aws s3 mb//Answer

63. List some of the prominent technological use cases of Docker.

• Infrastructure isolation//Answer   (gpt-1,2,4) (being-all)

- Configuration simplification//Answer

- Single tenancy//Answer

- Rapid deployment//Answer

64. Choose the advantage of Selenium and Jenkins integration.

- Jenkins can schedule your tests to run at specific times//Answer

With the help of Jenkins, you can save the history of the test cases and also generate periodic test reports.//Answer

- Jenkins also supports Maven and testing of applications with continuous integration.//Answer

- Reduce the execution time//Answer

65. What is the role of IAM?

- Allows you to set permission, roles, and users.//Answer   (gpt-1,3,4)
- Allows you to stores data as objects.
- Allows you to manage users and their access.//Answer
- It allows only specific users to use specific services.//Answer

66. What is the abstract class available in Selenium?

- WebDriver//Answer (gpt)
- By
- WebElement
- getText()

67. Which of the following are complex datatypes that are supported by Elasticsearch?

- Array//Answer
- Object//Answer
- Nested//Answer
- Number

68. Which port is used for Docker Swarm cluster management?

- 2388
- 7946
- 7950
- 2377//Answer

69. Adding or creating a document into a type within an index of Elasticsearch is called operation.

- Indexing//Answer
- deleting
- updating
- getting

70. ____is the central application in the AWS portfolio.

- Amazon Simple Queue Service
- Amazon Elastic Compute Cloud//Answer
- Amazon Simple Notification Service
- Amazon Relational Database Service

71. Which technique is used in Web driver Selenium to check whether a specific checkbox, radiobutton, or option in a drop-down box is selected?

- isSelected()//Answer
- selected()
- textSelected()
- isSelect()

72. What components are installed along with the Docker Desktop when we install Docker on Windows 10?

- Kubernetes
- Docker compose//Answer   (gpt-2,3,4)
- Docker   (being-1,2)
- Docker machine//Answer

73. After applying a Docker Swarm service configuration, you need to run a Linux command in acontainer to verify the configuration was applied. Which base command should you use?

- docker container exec//Answer   (gpt)
- service verify
- docker container verify
- docker service exe

74. Identify the valid Docker commands hat we can use to manage containers.
- docker container import
- docker container attach
- docker container export
- docker container associate   2,3

75. Which of the following is the default TestNG report output folder?

- testoutput
- test-output
- test
- testresult   2

76. What components are installed along with the Docker Desktop when we install Docker on Windows 10?

- Kubernetes
- Docker compose   (being-1,2)   (gpt-2,4)
- Docker assemble
- Docker machine   1,3

77. Which of the following are Elasticsearch APIs?
- Document APIs
- Search APIs
- Indices APIs
- Divide APIs   1,2,3

78. List some of the features of Kibana that extend the capability of Kibana dashboards.
- Export dashboards   (being-all)   (gpt-1,2,4)
- Manage indexes
- Delete visualizations
- Generate PDF reports without using plugins   1,4

79. List some of the considerations that we have to keep in mind when installing Kibana.
- Elasticsearch and Kibana must be of different versions
- Elasticsearch should already be installed to successfully start Kibana
- Logstash should already be installed before installing Kibana
- Elasticsearch and Kibana must be of the same version 1,2

80. Simplifies configuration auWhich states are you primarily interested while using a declarative cluster management approach?

- Current state
- Baseline state   (Not Sure)
- Default state
- Desired state   1,2,3

81.   What is the output of the following code?
import org.testng.annotations.Test;
public class TestNG {
@Test (priority = 1)
public void b method() { System.out.println("This is B method"); }

@Test (priority = 1)
public void a method() { System.out.println("This is A method"); }
@Test
public void d method() { System.out.println("This is D Method"); }
@Test
public void c_method() { System.out.println("This is C Method"); }

Answer.This is A method
This is B method
This is C Method
This is D Method

82.   Which of the following statements are true about TestNG grouping?

- Users can specify groups containing other groups
- Users can group multiple test methods into a named group
- Users can specify which method to exclude from group
- Users can use @BeforeClass to execute pre-condition before running any group methods   (Not Sure)

The following statements are true about TestNG grouping:1,2,3

83.   Which of the following are benefits of TestNG multithreading?
- Reduces execution of testing time
- Increase test result accuracy   (being-1,2,3)
- Less testing code is required   (Not Sure)
- Test multiply browsers and operation systems simultaneously.
   1,2,3,4

84.   What are valid reasons for using containers?

- Containers cannot be unit or integration tested

- Containers are fixed and cannot be rolled back
- Containers by design are scalable
- Containers are highly portable   3,4

85.   Identify the valid selenium webdriver wait.

- ExplicitlyWait
- ThreadWait
- FluentWait
- Implicitly Wait   1,3,4

86.   Which CLI commands can be used to create a new S3 Bucket?
- aws s3api make-bucket
- aws s3 cb
- aws s3api create-bucket
- aws s3 mb   3,4

87.   You have disabled the "Block all public access" option in an S3 bucket hosting a static website yet website users continue to rece "Access Denied" messages. Why is this happening?   (not sure)

- Users must authenticate with an IAM account
- The site certificate has expired
- S3 objects permissions are overriding bucket permissions
- A bucket policy was not configured   3

88.   Select some of the critical wait types that are provided by Selenium WebDriver.
- Thread wait
- Implicit wait
- Fluent wait
- Wait explicit   2,3

89.   You have enabled a CloudFront distribution for an existing Elastic Beanstalk web application. What should you instruct the web app developers to chan
- Origin URL references
- The PKI certificate
- OTCP timeout settings
- The caching TTL which   option 1

90.   Which of the following command format the response of request in JSON format?

- curl -XGET http://localhost:9200/catalog/products/1?pretty=true
- curl -XGET http://localhost:9200/catalog/products/1?format=json

- curl -XGET http://localhost:9200/catalog/products/1?type=json
- curl -XGET http://localhost:9200/catalog/products/1?format-type=json

opt1

92. Select all the distributions used by AWS CloudFront.

- Web
- FTP
- RTMP
- SMTP
- POP3   2,3

93. Which statements are valid when we want to delay execution and locate elements using XPath?

- thread.sleep(long millis) (gpt-1,3)
- findElement(By.xpath)(string id)).click()
- findElement(By.xpath) (string xpathExpression)).click()
- sleep.thread(long millis)   3

94. What benefit is derived from using the AWS Storage Gateway?
- Ability to migrate on-premises VMs to AWS   (gpt)
- Reduced network latency when accessing S3 content   (being)
- Ability to migrate VMs from other cloud providers to AWS
- Reduced network latency when accessing on-premises content
         opt1

95. Which of the following is the correct syntax for implicit wait of 5 Secs (d is the instance of Webdriver)?

- d.manage().timeouts().implicitly Wait(5, TimeUnit.SECONDS)
- d.timeouts().manage().implicitly Wait(5, TimeUnit.SECONDS)
- d.timeouts().implicitly Wait(5, TimeUnit.SECONDS)
- d.timeouts().webDriverWait.implicitly Wait(5, TimeUnit.SECONDS)
  opt 1

96. Which file contains the commands to build a Docker image?

- dockerfile
- docker-compose.yml
- requirements.txt
- app.py   opt1

97. What is the default port of Elasticsearch?

- 9200

- 5601

- 8080

- 8081 9200

98. Which method is used when you want to verify whether a certain check box, radio button or option in a drop-down box is
Web driver Selenium?
- is_Selected()
- isSelect()
- isSelected()
- is Select()   opt3

99. are the preferred mechanism for persisting data generated by and used by Docker containers

- Docker Volumes
- Docker File
- Docker Compose
- Docker   opt1

100. Select the code which helps you to locate the element that is having type as input and id as 'q'
- driver.findElement(By.xpath("//input[@id='q']"))
- driver.findElement(By.xpath("//input[id='q']"))
- driver.findElement(By.XPATH("//input[@id=q]"))
- driver.findElement(By.xpath(//id='q'))   opt1

101. Which file is the main node configuration file for ElasticSearch?
- elasticsearch.yml
- elasticsearch.config
- jvm.options
- Log4j2.properties   opt1

102. breakdown fields values of a document into a stream, and inverted indexes are created and updated using these values and these stream of values are stored in the document.
- Analyzer   (Not Sure)
- Shared
- Filter
- Tokenizer   d

103. Which of the following is a correct relationship between Regions, Availability Zones, and Edge Locations?

- Data centers contain regions.
- Regions contain Availability Zones.
- Availability Zones contain edge locations.
- Edge locations contain regions.   Opt2

104. What are the attributes of @Test in TestNG?
- Enabled
- Name   (being-1,2,4)   (gpt-all)
- Order
- Groups 1,2,4

105. Which method selects the option at the given index?
- selectedByIndex()
- selectByIndex()
- selectByIndexValue()
- selectIndex()   opt2

106. the Dockerfile commands that we can use to manage images.

- Run
- Volume
- Entry   (Not Sure)
- Maintain 1,2

Phase 4

Which of the following options are correct statements to apply the CSS class pick

☐ <p [ngClass]='pink'> background is pink</p>

<p [ngClass]='{pink:true}'> background is pink</p>

<p [ngClass]='["pink"]'> background is pink</p>

<p ngClass ={pink:true}>background is pink</p>

Please refer below

What will be the output of the below code?

lat product Details: [string, number): productDetails ["Samsung Galaxy J7", 16,8, Samsung Galaxy J5,321 for (let i=0;i< productDetails.length;i++ console.log(productDetails(11):

Samsung Galaxy J7 16 Samsung Galaxy J5 32

Samsung Galaxy J7 16 8 Samsung Galaxy J5 32

Samsung Galaxy J7 Samsung Galaxy J5 16 8

Compilation Error

What will be the output of the below code?

var line "Fundamentals of Javascript";

console.log("Slice (1, 12) ", line, slice (1, 12))) console.log("Slice (-20,-16) ",line.slice(-20,-16)); console.log("Slice (15)", line, alice (15))

option c

C)

Slice (2,5) : nda

Slice(-20,-16): enta

Slice (18) : vascript

that will be the color of Linel, Line, Line), and Lined when the above web page is rendered on the home

Line1 red, Line2 blue, Line3 cyan, Line4: green

Line1 red, Line2 blue, Line3 yellow, Line4: green

Line1 red, Line2 green, Line3 cyan, Line4: green

Line1 red, Line2 green, Line3: yellow, Line4: green

In order to create a custom impure pipe, you use_____ attribute in @Pipe decorator

 pure true

pure false

impure true

impure false

In the below code snippet, what is the correct statement to be placed at line number 6 to display the coursehlame?

Line 1: import (Component) from '@angular/core':

Line 2: Component ({

Line 3:

Line 4: template:

Line 5: <h1>>

Line 6:

Line 7:</h1>

Line 8:

Line 91

Line 10: export class AppComponent

Line 11:1

Line 121 coursellane: string "Angular":

Line 13:) selector: 'my-app',

{{ courseName }}

this.courseName

courseName

AppComponent.courseName

Mr.Zeal has designed the following web page. Choose the correct option for Z-index

Catal

Chead>

catyle>

Lng

position: absolute;

left: Ops:

1top: Ops:

</style> </head>

Chody>

Cing srow image.jpg" width="100" height="140">

</body>

<p>E-index refers to the stacking order of the elementsx/p>

</html>

p (z-index:-1:3

p (z-index:1,)

p (position:absolute; z-index: 1;)

p(position absolute, z-index:-1.)

Which of the following are the valid HTML5 input types?

colors

time

datetime

number

Which of the following option describes the setTimeout() function in JavaScript?

It halts all code execution for the given amount of time

It delays the execution of a specified function by the given amount of time

It halts all code execution after the given amount of time

It freezes the browser for the given amount of time

Rank the elements of the CSS box model from most inner to outer layer

Padding Border Content Margin

Margin Border Padding Content

Content Padding Border Margin

Content Border Padding Margin

Mr Ra working on a web development project. According to the styling guidelines provided by the organ ts of spacing between at the paragraphs that appear immediately after the heading Which of the below requirement?

pmargin-bottom:20px)

1(margin-bottom: 40px)

h1 (margin: 00:40px0)

pimargin-bottom: 0 20px 03

Consider the code snippet given below and find out which line will result in an error.

class Person (constructor (name, age) (this. pname name; this page age;

display() {

console.log("name:" + this.pname); console.log("age:" + this.page);

set pname (namePerson) (this. pname namePerson;) get pname() { return this.pname:)

1st per new Person();

par.pnams "Rexha";

console.log(per.pname);

console.log(per1.pname);

let pari new Person("Alex", 10);

Type here to search

Line no 8 gives error as no arguments have been passed to the constructor.

Line no. 10 gives error as this is not the way to fetch the instand variable of a class.

Line 10 displays undefined and line 12 displays Alex

Line 10 displays Rexha and line 12 displays Alex

Which of the following options would correctly set the viewport to make your website look good on all devices

<meta name="port" content="width=device-width, initial-scale=0"/>

<meta name="viewport" content="width=device-width initial-scale=1" />

<meta name="port" content="width=device-width inity scale=1"/>

<meta name="viewport" content="width=devicewidth, initial-scale=1" />

Ryan is trying to create an email account. During the registration process, as soon as he focuses on the name held and enters the character to fill his name, he gets a message This name is taken

We understand that the website is using JavaScript Event-handling to respond to the data entered by Ryan Which event do you think is triggering the JavaScript code for the account to check the value entered by the user7

Oonfocus

onblur

Oonkeypress

Onkeyup

Which of the following are the valid syntax of using ng Class directive to apply CSS classes A,B in Angular?

<h1 [ngClass]="A B"Hello World <h1>

<h1 [ngClass]="['A','B']" >Hello World <h1>

<h1 [ngClass]="('A':true,'B' true)" >Hello World <h1>

<h1 {ngClass]="A,B" >Hello World <h1>

-----------means that if we declare a variable (declared but not initialized) at the end of a function, the runtime will hoist it to the top and we will not have any error if we would have used that variable before being declared

Variable hoisting

Overloading

Inheritance

Static Typing

What will be the output of the below code?

function sayli (person: string) { return "Hello, + person:

var customer :string[] document.body.innerHTML

["Tom", "Harry", "Jack"];

sayli (customer);

Hello Tom

Hello

Hello Tom Harry Jack

Compilation Error

What is the correct statement to bind required and maxlength validators to name field in a reactive T

name ['. Validators required, Validators maxlength(10)]

name: [Validators required, Validators.maxlength(10)]

name: Validators required, Validators.maxlength(10)

Predict the output of the below code snippet

class Demo {

n:number 9:

check () {

if(this.n==9) {

let n: number= 10: console.log(this.n);

}}}

let demoObject=new Demo (): demoobject.check();

9

10

11

Compilation Error

Select valid states of Promise Object.

pending

fulfilled

rejected

completed

Rahul has completed the development of a website. Rahul needs to add "note" keyword before each paragraph in one of his web pages and Rahul has forgotten to end headings with full-stop How can achieve these requirements?

Using before and after pseudo class

Using first-letter and after pseudo class

Using before for first requirement and "full-stop" can be added manually in webpage

Rahul cannot achieve this requirement.

</body>

<p id="idi">Paragraph</p>

</html>

Red, red and blue respectively

Red, black and blue respectively

Red, black and black respectively

Red, blue and blue respectively

_____option of Angular CLI indicates to use inline templates for the project

-inline

-inline-templates

-inline-temp

-inline-template

Rest parameters are used when

datatypes of parameters are not known

number of parameters are not known

 function needs to be called recursively

O function needs to be called asynchronously

The purpose and function of the ADDRESS and CITE tags has changed since HTML 4.01 and are now syndication purposes. Identify the true statements that describes how the function of each tag has ch HTMLS

The Address tag now defines the contact information of the author or owner of a document allowing you to have one sulle par web page

The Cite tag now defines a citation or article footer

The Cite tag now defines the title of a work such as a song, book, or movie

The Address tag now defines the contact information of the author or owner of a document or an article allowing you to multiple authors for a single page

Which of the following are the valid attribute-directives in Angular?

ngStyle

ngClass

ngSwitch

ngif

Which of the following are the valid statements with respect to production builds?

Uses AOT compilation

Files are tree shaked

Source maps are generated

Cas are extracted to js files

Uses JIT compilation

Which of the following are the valid methods of an Array object?

reverse()

sort()

search()

filter

Which of these operations are permitted if you apply Object.freeze() on myObject?

Adding a property to a nested object in myObject

Adding a new top-level property to myObject

Modifying a top-level property of myObject

Modifying a property of a nested object in myObject

What will be the output of the below code?

let originalstring="Digital!";

let updatedStringl originalstring.substr(2,3); let updatedString2 originalstring.substring (2,3). document.write(updatedStringie'br>'); document.write(updatedstring2)

git g

git git

ggit

gg

Which of the following is a valid command to create a component in Angular?

ng generate component <component-name>

ng create component <component-name>

Ong create <component-rame>

Ong generate <component-name>

Identify which of the following Pseudo classes can be applied to hyperlinks.

Cue

Clicked

Hover

Visited

Focus

You are creating a web page that requires some text to span across the width of the screen and other preos be emphasized within those text blocks. Which statements below correctly explain the rules about block and elements that will help you build your web page?

You should use block-level elements when you want text or content to go across the width of the browser window or to s on a new line.

You should use block-level elements when you want text or content to align horizontally with an image on a web page

You should use inline-level elements when you want to align or format text without having it start on another line or spen the width of a browser window.

You should use inline-level elements when using the <p> tag.

Which of the following is true about border property?

border short hand property will not work if border width is not specified.

border will not appear if border style is not specified.

border will not appear if border color is not specified.

border will not appear if border height is not specified.

This <article> </article> and <section></section> tags are new to HTML5, Identify the true statements that de ench is used in HTML5.

Article elements or tags in HTML5 can be used as CSS styles that group images on a web page that are separated by chunks of content

Article elements or tags in HTML5 can be used as RRS syndication and applied to dynamic content such as forum posts blog posts, comments, and news stories.

The Section tag in HTML5 defines and isolates tables and images that have text wrapped around them,

The Section tag in HTML5 defines and isolates sections or logical chunks of content in a document such as an Introduction, header, or footer.

Which of the following statements Angular component consists of?

A component class that handles data and functionality.

An HTML template that determines the UI.

Component-specific styles that define the look and feel.

Angular Routing module

Which of the following members can be included in the class?

constructor

properties

methods

modules

How do you add a background color for all <h1> elements?

all.h1 (background-color:#FFFFFF)

h1.all (background-color:#FFFFFF}

ht (background-color:#FFFFFF}

h bgcolor:#fffff

Which of the following are the valid methods of XMLHttpRequest object?

send()

open()

cancel()

abort()

When you hover your mouse over the host element (tag), the color of the tag should change. In addition, when the mouse is moved away, the color of the tag should change to its default color. To do this, you need to handle events raised on the host element in the directive class. Which decorator is used to implement this functionality?

@Host

HostBinding

HostListener

Attribute

Which of the following attributes controls the valid numeric boundaries of a range control?

min

minbound

count

max

Which are the built-in browser validation features?

max

minlength

conversion

currency

required

Which of the following will map the name of an input parameter "studentinfo" to a field named "students"

@Input('studentinfo') students

@Input() studentinfo: students

Input() students: studentinfo

Input('students") studentinfo

What will be the output for the following code?

// eas rest parameter

function fun(...input) {

let sum 0:

for(let i of input)

return sum:

console.log (fun (1,2)); console.log(", "+fun (1,2,3)); console.log(", "+fun (1,2,3,4,5));

3,6,15

3. undefined

3,error

3,6,error

What will be the output for the following code?

let employee = (empId: '11001',

empName: (

firstName: 'John',

middleName: 'Thomson',

lastName: 'Mark'

empStatus: 'Active'

let (firstName: middleName, lastName) = employee.emplame; console.log (middleName);

John

Thomson

Mark

Compilation Error

Which of the following are the valid methods of an Array object?

reverse()

sort()

search()

filter()

Which of the following are the valid methods of XMLHttpRequest object?

send()

open()

cancel()

abort()

What is a proper syntax to construct a module?

Ovar variable_name = angular.module("app_name", []);

Ovar variable_name = angular.module("app_name");

Ovar variable_name = angular.module();

Ovar variable_name = new module():

The tag defines an alternate content to be displayed to users that have disabled scripts in the browser or have a browser that doesn't support script.

<noscript>

<script>

<notscript>

 <js>

Which of the following statements Angular component consists of?

A component class that handles data and functionality.

AngularRouting module

An HTML template that determines the UI.

Component-specific styles that define

Typescript compiler configuration is stored in ___file

package.json

Otsc.json

tsconfig.json

Olint.json

Select the new HTML5 layout containers,

<aside>

<boxtitle>

<header>

<footnote>

1:yellow, 2: yellow, 3: yellow, 4: yellow

1:green, 2 yellow, 3:green, 4: yellow

1:yellow, 2:green, 3:green, 4: yellow

1 yellow, 2: yellow, 3: green, 4: yellow

Kah wants to apply margin property to an element with top-margin value of 30px, bottom-margin value of 20px and of a margien value of 25px. Which among the following will help her in achieving the requirement?

margin: 25px 30px 20px;

margin: 20px 30px 25px;

Omargin: 20px 25px 30px

Omargin: 30px 25px 20p.

You are creating a web page that requires some text to span across the width of the screen and other preces of lext to be emphasized within those text blocks. Which statements below correctly explain the rules abou brock and inline elements that will help you build your web page?

You should use block-level elements when you want text or content to go across the width of the browser or to start on a new line

You should use block-level elements when you want text or content to align horizontally with an image on a page

You should use inline-level elements when you want to align or format text without having it start on another of span the width of a browser window.

You should use inline-level elements when using the <p> tag

What will be the output for the following code?

let prices new Array(67,23,90,67,12,73): prices.push(110); prices.unshift(43); prices.pop(); prices.unshift(89): prices.shift(): console.log(prices);

[43, 67, 23, 90, 67, 12, 73]

[67, 23, 90, 67, 12, 89]

[67, 23, 90, 67, 12, 73,89]

[110, 67, 23, 90, 67, 12, 89]

Which of the following are the features of HttpClient service?

The ability to request typed response objects.

Streamlined error handling.

Request and response interception.

Non Testability

What will be the output of the below code?

inport Pipetransform) from Bangular/core'

mmport class LangthPipe implements PipeTransform (Jangth(valus: string): string(return "Length evalus.length:

Olength method should be an no args method

The Length Pipe class has not implemented the transform() method of Pipe Transform Interface

Length Pipe class should be using @Component decorator to make it working

The length method should return an numeric value

Which of the following are the valid properties of Promise Object?

state

result

readyState

response