**Your Trusted Testing and DevOps Partner**

**Logical Thinking**

**and SDET**

**Subject: Frugal Testing SDET Rounds**

Welcome to the Frugal Testing SDET rounds. In this exam, you will find two sections:  
**Section A:** A series of 2 questions out of which you have to attempt ONLY ONE. The single question bears 20

points.

**Section B:** A series of 16 questions each bearing 5 points for a total of 80 points. Question Number 19 does not carry any marks however is compulsory.

***General Instructions:***

Also, follow the instructions on how to save and share the test code.

1. It has been assumed that automation testing is a totally new practice for the person attempting this exercise.
2. It is recommended that all answers are precise and at least 100 words long.
3. Please do not take help from others, but rather use the internet freely while doing this homework as the same will be discussed in detail in the interview.
4. There should not be any plagiarism.

***Prerequisites for Section A:***

1. Download and install the Java Software Development Kit (JDK)
2. Install Eclipse/IntelliJ IDE
3. Download the Selenium Java Client Driver
4. Configure Eclipse/IntelliJ IDE with WebDriver

**The closure date for this homework is << 32 Hours >>.**For any queries/help, kindly get in contact with your placement coordinator for any specific query.

**Please note:** The final response file should be saved as “Zip file” that should contain:

* For Section A:
  + Screen recording video file of the complete execution from displaying the written code, running the complete test suite from first test case till the last followed by showing the saved screenshots and logs in a folder from the test run.
  + Exported project file from IDE.
* For Section B: A word file containing all 18 answers.

Zip file should be submitted in the following format:

<Name\_of\_Candidate>\_<College Name>\_<Roll Number>

Please submit the file to your placement cell officer.

***Section A:*** *Attempt* ***any one*** *question as per your choice from 2 questions below:*  
**Preferred IDE to be used - Eclipse or IntelliJ**

**Automation tool to be used – Selenium**

1. Automate the functionality to book the train from https://www.makemytrip.com/railways/

Check if you have landed in the correct page

Print the URL and Title of the Page

Click on FROM

Enter the city in FROM: DELHI

Click on TO

Enter the city in TO: LUCKNOW

Click on Travel Date

Select a date: 20 May

Click on class.

Select a class from dropdown: Third AC.

Click on SEARCH Button.

Record the Automation Script Running using any Screen Recording Software.

Share the drive link for the recording.

Save screenshots and logs of all the step.

**OR**

1. Automate the functionality door to door delivery https://www.trukky.com/door-to-door-goods-delivery

Check if you have landed in the correct page

Print the URL and Title of the Page

Enter the Pickup City-Hyderabad

Select the city Hyderabad, Telangana, India from dropdown

Enter the drop city-Delhi

Select the city New Delhi, Delhi, India from dropdown

Click on Check Price

Click on services type as a personal

Select load service as Few packed items ( 1 - 5 )

Click on Add material

Select a material from choose material dropdown-Window AC

Enter no items-2

Click on forward button("->").

Click on next button

Select a date from Choose pickup date-28 April

Click on next

Enter email, number and company name

Click on get Price Button

Record the Automation Script Running using any Screen Recording Software

Share the drive link for the recording.

Save screenshots and logs of all the step.

***Section B:***

*All questions below are* ***mandatory*** *to answer.*

1. Visit through the website of Frugal Testing:
   1. What pages did you find crucial and why?
   2. Tell us which of our case studies you find as most valuable and Why?
2. Reasons for your interest in this internship and what skills or experiences do you hope to gain?  
   -> Honestly, joining this esteemed organization will help me learn a lot. I would love to seek the guidance of experienced and learned teams that are already onboard. That way, I can become a better professional in the future. Yours is a renowned brand and being a part of this huge enterprise will strengthen my base too. That is what matters at the end of the day, a strong foundation.
3. Tell us about a situation where you had to work under pressure?

->One time I was supposed to deliver a project (Apps) to my university in five days.

1. What are your strengths and areas of improvement? Elucidate two examples of each and how do you plan to work on your areas of improvement?

My strength is Collaborative - I am very collaborative. I have always enjoyed working on teams and it is my strongest attributes.

Sometimes I self-criticism of myself. some movements I feel low confident but I work on it and come out of it. To improve my weakness daily I do meditation to control my mind.

1. According to you what is the importance of work environment and what environment do you prefer to work in. How would you add value to our organization?

->I enjoy working in an environment where the members of the team have a strong sense of camaraderie and a good work ethic.

1. What is your vision about life and professional career after 5 years?

-> My long-term goal is to see the company at a topmost position where I am one of the people responsible for that.

1. What is the impact of semiconductor chip shortage across the global economy?

The global semiconductor chip shortage has caused disruptions in supply chains and increased production costs, leading to higher prices for consumer electronics and affecting industries such as automotive, computing, and telecommunications.

1. Please share the following details in your Profile :
   1. LinkedIn Profile Link - https://www.linkedin.com/in/soubhik-kar-283748197/
   2. Resume (PDF file)
   3. Any other Technical profiles like Hackerrank, CodeChef, Github, HackerEarth?

Hackerrank - https://www.hackerrank.com/karsoubhik29

* 1. Any other Project links about which you are really proud of

An RFID Based Attendance System Using NodeMCU is a modern

attendance system. It can be useful in different places like schools, Colleges, industry and private organizations to register the attendance of students, teachers, employees, etc

Github link - https://github.com/soubhikkar/rfidattendance

1. Visit and follow Frugal Testing page on all the social media platforms. Like/Share the posts and also share your views on the posts in the comment section.
2. LinkedIn : https://www.linkedin.com/company/frugaltesting/mycompany/
3. FaceBook : https://www.facebook.com/FrugalTest
4. Instagram : https://instagram.com/frugaltesting?igshid=YmMyMTA2M2Y=
5. YouTube : https://www.youtube.com/channel/UCjikgYGfeqU4ZPKQNm1V5tg/featured
6. GooglePage : <https://frugaltesting.com/>
7. What do you understand by test closure?

* Test Closure is a document that provides a summary of all the tests covered during the software development lifecycle.

1. What is monkey testing?

* monkey testing is a technique where the user tests the application or system by providing random inputs and checking the behavior, or seeing whether the application or system will crash.

1. How do we create an Amazon EC2 instance?

To create an Amazon EC2 instance, you need to follow these steps:

1. Sign in to the AWS Management Console

2. Choose the EC2 service

3. Click on the "Launch Instance" button

4. Select an Amazon Machine Image (AMI) to use as the base for your instance

5. Choose the instance type that fits your resource and cost requirements

6. Configure the instance details, such as the VPC, subnet, IAM role, etc.

7. Add storage to the instance in the form of an EBS volume or an instance store volume

8. Configure security settings by creating or selecting a security group

9. Review the instance launch details and click on the "Launch" button

10. Choose an existing key pair or create a new key pair to securely SSH into the instance

11. Launch the instance

After the instance is launched, you can connect to it, configure it, and deploy applications on it.

1. Explain the PDCA cycle?

PDCA or the Deming cycle is a management methodology that aims to continually improve processes. This cycle is based on four stages: plan, do, check, and act. To adapt to market changes, improve efficiency, boost productivity, and meet the needs of your customers, having a method is required.

1. Share a pseudo-code to find duplicate characters in the string. Example: INPUT: “**Welcome to Frugal Testing**”, OUTPUT: “**eltg**”.
2. Is Automation Testing A Complete Replacement For Manual Software Testing? What is your view on this?

No, Automation testing is not a complete replacement for manual software testing. Automated tests can save time and improve consistency, but they can also miss edge cases, misinterpret the intent of a requirement, and overlook issues that arise from user interactions.

My view is that automation testing should be used to complement manual testing. Automated tests can be used to perform repetitive and time-consuming tasks, while manual testing can be used to provide a human perspective and catch issues that automated tests may miss. The ideal testing approach combines both manual and automation testing to achieve a comprehensive and efficient testing process.

1. Give some examples of web applications that are used in day-to-day life? How will you improve their performance, please elaborate?

Examples of web applications used in day-to-day life:

Google search, Gmail, Facebook, Amazon, Netflix, Twitter, Zoom, Dropbox, Spotify, etc.

To improve the performance of these web applications:

Reduce the size of images and other media files

Use a fast and reliable web hosting service

Minimize the use of heavy scripts and plugins

Implement lazy loading

Use a Content Delivery Network (CDN)

Use browser caching

Minimize HTTP requests

Optimize database queries

Use a modern web framework that is optimized for performance.

1. Please write an article on any ONE of the below topics

(500-1500 words, no plagiarism, better to use some graphics)

1. Agile and DevOps
2. Mobile application testing
3. Chaos engineering
4. Top 10 chrome extensions to find Xpath in Selenium
5. What is load average in top command in Linux?
6. What is exploratory testing and its pros and cons?
7. Best performance testing tools to look out for in 2021
8. Cybersecurity for cloud applications
9. What is a Zero-day attack?
10. What, Why, and How of API penetration testing?
11. What are the 7 steps in software testing life cycle?

Your article will be evaluated on following parameters:

1. Genuine Effort to write article
2. No Plagiarism
3. Overall Tone and Tonality of the article
4. Overall Outline
5. Clear and terse

Cybersecurity for cloud applications involves protecting sensitive data and information stored in the cloud from unauthorized access, theft, or cyber-attacks. This includes implementing measures such as encryption, multi-factor authentication, access controls, and regular security updates. It is crucial for organizations to properly assess their cloud security risks and work with their cloud service provider to implement adequate security measures to ensure the confidentiality, integrity, and availability of their data in the cloud.

1. **The following questions have no right or wrong answer. It is a basic measure to judge your personality. Please exhibit integrity while answering the following. You need to choose only one option.**

**A: You are totally exhausted because your week was endless and less than great. How are you going to spend your weekend?** Answer: \_\_\_i\_\_\_

1. I'll call my friends to ask about their plans. I heard that a new restaurant opened / a nice comedy is playing in the cinemas / there are big discounts at the paintball club. We should all go out together.
2. I'll switch on the "Don't disturb" mode on my phone and stay at home. I'll watch a new episode of my favourite TV show, do a puzzle, and take a long bath with a book.

**B: Which of these 2 descriptions suits you more?** Answer: \_\_ii\_\_\_\_

1. The most important thing for me is what's happening here and now. I assess real situations and pay attention to details.
2. Facts are boring. I love to dream and play over upcoming events in my mind. I rely more on intuition than information.

### **C:** **A competitor of your current employer is trying to entice you. You have doubts because the salary is much higher there, but the staff here is great. Moreover, the head of your department hinted that he will recommend you to the bosses when he retires. How are you going to make a decision? Answer: \_\_\_i\_\_\_**

1. I'll continue with the same job as long as the manager retires by weighing up all the options.
2. I'll shift to my competitor as because the remuneration is higher as compared to the current position.

### D: **Only 2 weeks are left before your close friends' wedding. How are the preparations going?**

### **Answer: \_\_\_i\_\_\_**

1. One month ago, I chose the saxophonist who will play a medley of our school songs / collected the couple's photo love story / composed a poem / pressed my suit / made appointments with the stylist and makeup master. I prefer to be fully armed.
2. Why prepare? I'll be having fun and enjoying myself at the party. I'll improvise my wedding speech. The best things happen spontaneously.