

KPIT

Hello,
Automobeliever!

Greetings
from KPIT.

It's time for a
round of
introductions.



We're a global technology company with a vision to reimagine mobility *with you*, for creating a cleaner, safer & smarter world



MISSION

To understand automotive better than any other software company in the world, and to understand software better than any other automotive company.



Moving towards becoming the global no.1 software integration partner for vehicle makers.



Depth of expertise across focus domains.



Global delivery models for accelerated development.



A Zero-Defect-Delivery approach.

Proud to be
Strategic
Software
Partner
to Leaders
in Mobility

Recent Announcements



Strategic large deal
with BMW Group for
the next generation
charging electronics
program



Triumph Motorcycles
partners with KPIT to
bring 'Distraction Free
Digital Connected
Experience' to bikers



BMW Partners
with KPIT for
Autonomous
Driving

[Read More](#)



Volkswagen AG
approved KPIT's
AUTOSAR stack

[Read More](#)



Eaton partners
with KPIT for
electric
mobility

[Read More](#)

Note :Client logos - Illustrative list also includes customers
published in Hansen report



Best Place to Grow for Automobelievers



7000+
Engineers working
on mobility
technologies

25+
Different
Nationalities



150+
University
associations for
Hiring & Upskilling

30%
Women
Employees



Best Place to Grow

Creating Net New Talent

KPIT

a

Channelizing innovative minds from within and outside KPIT to help clients, employees and KPIT grow together (Sparkle, iCanCrackIT etc)

b

Comprehensive Learning initiatives for Freshers & laterals

c

Opportunity to solve new age challenges in mobility

d

Competency Development Framework for constant upskilling

e

Promoting internal talent

f

Collaboration with global university for technology & management master's program

KPIT

KPIT's Off-Campus Open
Drive for BE / BTech
Freshers' – 2022 Batch

30 April 2022



Overview



Overview

- Job Description and Eligibility criteria
- Registration Process on KPIT's Talent Ojo portal
- Overall Test Structure and Three Stage Selection Process
 - Pre-Placement Session: Tuesday, 26th April, 2022
 - Day 1 Assessment: Saturday, 30th April, 2022
 - Day 2 Assessment: Wednesday, 4th May, 2022 (For short-listed candidates from Day 1)
 - Day 3 Assessment: Friday, 6th May, 2022 (For short-listed candidates from Day 2)
- Syllabus for the Tests
- Instructions / Rules for the Exam
- Key Take-aways
- Contact Details



Job Description and Eligibility Criteria

Job Description – Depends upon your Dept in KPIT

- Different domains
 - Autonomous Driving
 - Connected Vehicles, Mobility
 - Power-train
 - Classic and Adaptive AUTOSAR
 - Artificial Intelligence applications for Mobility
- Analyze requirements given by the clients.
- Design or understand algorithms / concepts → mathematical model.
- Programming in C, C++, MATLAB®, Simulink or Python.
- Testing of code and Simulink models
 - Verification and Validation
 - Hardware-in-the-loop testing
- Optimization and porting of code onto micro-processors and micro-controllers

Joining CTC and Benefits

- Cost to Company (CTC) upon Joining:
 - For Exceptionally Good Performance in the Assessment Tests:
6 LPA (Annual CTC)
 - For Average Performance in the Assessment Tests:
4 LPA (Annual CTC)
 - * INR 50,000 Joining Bonus is applicable once you join the Company along with 2 Year bond.
- Other Benefits (may change / improve)
 - Medical Insurance for Employees - 6 Lac
 - Parental Health Insurance – 5 Lac for parents and in-laws (payment basis, 50% cheaper than market)
 - Personal Accident Insurance – 20 Lac
 - Free Annual Health check for employees and their family members (parents, in-laws, spouse)

Eligible Branches

- Comp Science & Business Studies
- Comp Science; Comp Science and Information Technology; Information Technology
- Electronics & Electrical Engineering
- Electronics & Telecom Engineering
- Electronics and Communication
- Electronics and Comp Science Engineering
- Instrumentation Engineering

*Pure Electrical and Pure Mechanical branch students are not eligible to apply


Eligibility Criteria

Academic Qualifications (Any one track):

- 10th → 12th → BTech (55% aggregate or equivalent in case of CGPA)
- 10th → Diploma → BTech (55% aggregate or equivalent in case of CGPA)
- 10th → 12th → Diploma → BTech (55% aggregate or equivalent in case of CGPA)

In this case, Students need not enter their Diploma marks in the TalentOjo portal while application.

- Graduation passing-out year – 2022 only



Registration & Application Process on
TalentOjo Portal (Open till 27th
April, 11:00 AM)

Registration & Application Process in KPIT's TalentOjo Portal (Open till 27th April, 11:00 AM)

Step 1 : To Register [CLICK HERE](#)

User ID: Personal email-id (**not college e-mail id**)

Password: Create a new password using the following process.

- You can reset it by clicking on 'Forgot password' link.
- Then follow the instructions to create a new password.

Step 2 : To apply [CLICK HERE](#)



Test Structure

Test structure:

Day 1: Saturday, 30th April, 2022

(2.5 hours in total for both sections)

6:30 PM to 9:00 PM: You are allowed to log into the test from 6:30 PM to 7:15 PM only



Day 1: Section A

(All sub-sections are **mandatory**)

1. Aptitude
2. Engineering Mathematics
3. Professional skills and Knowledge of English Language
4. Basics of C Language

Day 1: Section B

(Attempt **any one sub-section** from the following, as per your expertise)

1. Basic Electronics & Engineering Fundamentals
2. CS / IT Engineering
3. Electrical Engineering



Day 2: Wednesday, 4th

May, 2022 (For short-listed candidates from Day 1)

(3 hours)

6:30 PM to 9:30 PM: You are allowed to log into the test from 6:30 PM to 7:15 PM only

Coding Test



Day 3: Friday, 6th May, 2022 (For short-listed candidates from Day 2)

(1 hour)

6:30 PM to 7:30 PM: You are allowed to log into the test from 6:30 PM to 7:15 PM only

Professional Skills (English Communication) Test





Sample Questions

Day 1: Section A

What should you expect in this section?

This Section is common for all the participants

Aptitude

Engineering Mathematics

Professional Skills and Knowledge of
English Language

Basics of C Language

Example Problem on Aptitude

1. The percentage profit earned by selling an item for Rs. 1920 is equal to the percentage loss incurred by selling the same item for Rs. 1280. At what price should the item be sold to make 25% profit?

A. Insufficient Data

B. Rs. 3000

C. **Rs. 2000**

D. Rs. 2200

2. The average age of a class of 22 students is 21 years.

The average increased by 1 when the teacher's age also included.

What is the age of the teacher?

A. 48

B. 45

C. 43

D. **44**

Example Problem on Engineering Mathematics

1. The lowest eigen value of the matrix $\begin{bmatrix} 4 & 2 \\ 1 & 3 \end{bmatrix}$

A. 5

B. 2

C. 1

D. 4

2. Solve $\lim_{x \rightarrow \infty} \frac{1 - \cos(x)}{x^2}$

A. 0.25

B. 0.5

C. 1

D. 2

Example Problem on Professional Skills and Knowledge of English Language

1. Select the option in which both the columns are exactly same:

- | | | |
|----|--------------------------|---------------------------|
| A. | KPIT Technology Ltd | KPIT Technologies Ltd |
| B. | Larsen and Tuobro Ltd | Larsen and Toubro Ltd |
| C. | Tata Consultancy Service | Tata Consultancy Services |
| D. | Google Inc. Ltd. | Google Inc. Ltd. |

2. I ____ watching TV when Paul and Simon arrived.

- A. were
- B. is
- C. was
- D. am

Example Problem on Basics of C Language

1. In statement `"char *const q = "KPIT" ;"` q is a:

- A. pointer to constant
- B. **constant pointer**
- C. const pointer to constant

2. A structure can be nested inside another structure.

This statement is:

- A. **True**
- B. False



Sample Questions

Day 1: Section B

Basic Electronics & Eng. Fundamentals

You should expect Multiple Choice Questions on these topics / subjects.

CONTROL SYSTEMS,
SIGNAL PROCESSING



DIGITAL
ELECTRONICS

ANALOG ELECTRONICS,
CIRCUIT THEORY



COMPUTER
ORGANIZATION

Example Problem for Basic Electronics & Engg Fundamentals

1. Which of the following transfer function will have the greatest maximum overshoot?

- A. $9/(s^2+2s+9)$
- B. $16/(s^2+2s+16)$
- C. $25/(s^2+2s+25)$
- D. $36/(s^2+2s+36)$

2. Simplify $Y = AB' + (A' + B)C$.

- A. $AB' + C$
- B. $AB + AC$
- C. $A'B + AC'$
- D. $AB + A$

Computer / IT Engineering

You should expect Multiple Choice Questions on these topics / subjects.

DATA STRUCTURES



COMPUTER
FUNDAMENTALS AND
ARCHITECTURE

OBJECT-ORIENTED
CONCEPTS



DATABASE

Example Problem for CS / IT Engineering

1. Which of the following recursive formula can be used to find the factorial of a number?

- A. $\text{fact}(n) = n * \text{fact}(n)$
- B. $\text{fact}(n) = n * \text{fact}(n+1)$
- C. $\text{fact}(n) = n * \text{fact}(n-1)$
- D. $\text{fact}(n) = n * \text{fact}(1)$

2. Which among the following best defines abstraction?

- A. Hiding the implementation
- B. Showing the important data
- C. Hiding the important data
- D. Hiding the implementation and showing only the features



Sample Questions

Day 2: Coding Round

(Only for **Short-listed** Candidates from Day-1)

Example Problem 1 for Coding Round

Identify the speed-optimized code out of the below code snippets.

Code snippet #1:

```
1 #include <stdio.h>
2 int main(void)
3 {
4     int data[1000];
5     int x = 1, y = 5, c = 25, d = 7;
6     for (int i = 0; i < 1000; ++i) {
7         data[i] = (((c % d) * x / y) % d) * i;
8     }
9     return 0;
10 }
11
```

Code snippet #2:

```
1 #include <stdio.h>
2 int main(void)
3 {
4     int data[1000];
5     int x = 1, y = 5, c = 25, d = 7;
6     int value = (((c % d) * x / y) % d);
7     for (int i = 0; i < 1000; ++i) {
8         data[i] = value * i;
9     }
10     return 0;
11 }
```

- A. Code snippet #1 and code snippet 2 both leads to speed optimized code
- B. Code snippet #1 leads to speed optimized code
- C. Code snippet #2 leads to speed optimized code
- D. Code snippet #1 and code snippet #2 will have same execution times in similar environment

Example Problem 2 for Coding Round

Predict the output of given code snippet?

```
#include <iostream>
using namespace std;
int i;
class A
{
public:
~A()
{
i=10;
}
};
```

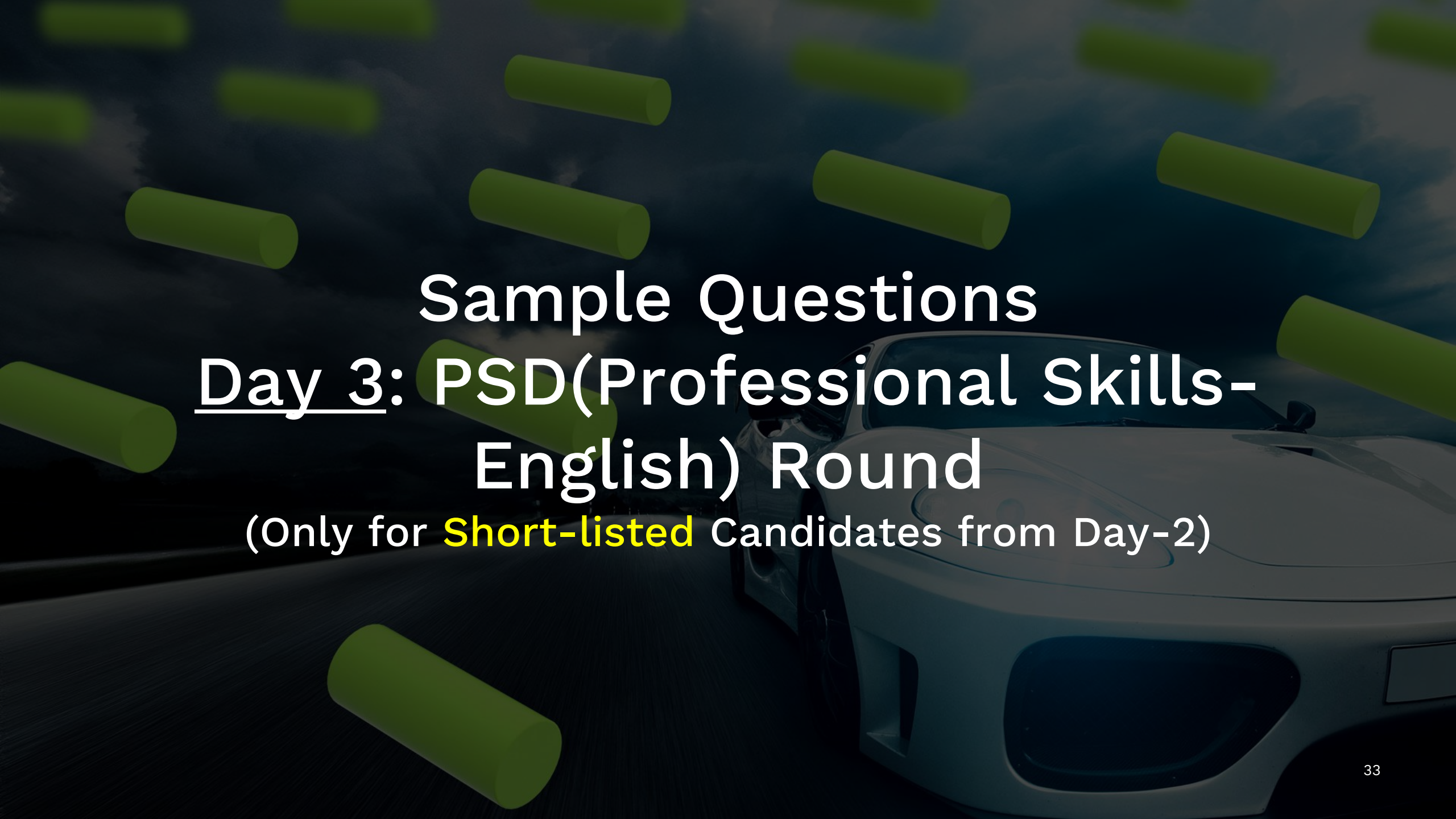
```
int foo()
{
i=3;
A ob;
return i;
}
int main()
{
cout << foo() << endl;
return 0;
}
};
```

A. 0

B. 3

C. 10

D. None of the above

The background of the slide features a dark, moody image of a car, possibly a sports car, with its headlights on. Overlaid on this image are numerous green, 3D-rendered cylinders that appear to be falling from the top of the frame, creating a sense of motion and depth. The overall color palette is dark with green accents.

Sample Questions

Day 3: PSD(Professional Skills- English) Round

(Only for **Short-listed** Candidates from Day-2)

You should expect Audio/Video & Written Questions on these topics / subjects:



Pronunciation

It reflects the ability of candidates to produce consonants, vowels, and adding/ deleting sounds. It measures how accurately one is able to produce sounds at the phoneme levels within a word.



Fluency

It assesses candidates on how fluent they are while speaking in terms of the rate of speech, pauses, and addition of fillers, through reading and repeating sentences and speaking on the spot on a topic.



Grammar

It reflects the ability of candidates to use correct grammar while speaking. Candidates are evaluated on 5 major topics - subject-verb agreement, tenses, word order, prepositions and articles.



Listening Comprehension

It assesses candidates on their ability to listen attentively to a conversation or a piece of information in an audio format and recall important pointers and make inferences out of the conversations.



Rules for the Test (Very Important)

How Should You Arrange Your Test Environment?

- Please ensure that your monitor / laptop is close to a wall, and **no one can stand behind the monitor.**
- **You will be asked to show the room anytime during the test. Hence ...**
 - Ensure that no one else is in your room during the test.
 - You should not have any digital device or textbook around you when the test is being conducted.
 - You should not keep a mobile-phone or any video-casting device around you.
- Please have a high-resolution camera mounted on the monitor. **Do not change its position.**
- **Please do keep some rough-paper, pen and calculator with you, because many questions would require calculations.**
- No water-breaks / toilet-breaks are allowed. Please, do keep some water and snacks handy.
- **The test-platform shall automatically log you out if ...**
 - Your **complete face** is not visible **throughout the test.**
 - Please ensure that you are facing a light-source, so that your face is clearly visible. Also, there should not be any light-source behind you.
 - Someone else is talking in the room or there is some noise in the room.
 - You are wearing tinted glasses or sun-glasses.
 - You are browsing any web-site.
 - You connect any additional monitor over VGA, HDMI or Bluetooth / Wi-Fi.



Key Take-aways

You should remember following things before you appear for this test.



Keep your Aadhar card / Govt. ID handy to authenticate yourself.
It should be a non-laminated card.
Mobile-photos will not be allowed.



Test 1 is planned on **30 April 2022**
Those who qualify Day 1 will have Test 2 on **4 May 2022** (Day 2).
Those who qualify Day 2 will have Test 3 on **6 May 2022** (Day 3)

Key Take-aways

You should remember following things before you appear for this test.



Reliable and high-speed internet connection.



A High-Resolution camera so we can proctor your test.



Dedicated time for the test duration and for the initial registration process.

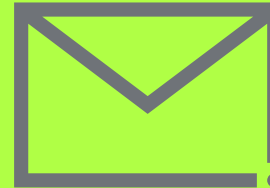
Further Process & Contact Details

After Day 1 test, we will share the list of shortlisted candidates for Day 2. Similarly, after Day 2, we shall share the list of shortlisted candidates for Day 3 and after Day 3 we shall share the list of shortlisted candidates for further process.

Campus Team, KPIT

campus@kpit.com

Please do not communicate with anyone else.



KPIT does not charge any money from anyone for the Recruitment Process.

Beware of Fraudsters !!!

In case of fraud, KPIT Legal / Campus Team will be unable to help you.



About the Assessment Platform

(Explanatory Video-link will be sent after Registration)

An aerial photograph of a two-lane asphalt road winding through a vast, green agricultural landscape. A white bus and a white truck are traveling along the road. The fields are divided into sections by tracks and have a grid of small green diamond patterns overlaid on them. In the background, there is a line of trees and a distant horizon.

All the best !