



# Placement Preparation Doc.

An Open Initiative from 2017-21 Batch

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*“ 75% of the interviews fail because of **no preparation** ”*

# How to Edit / Contribute?

Add the relevant information to corresponding companies. The structure is as shown

## **Company name (IT/Core) (Batch year)**

You can add eligibility criteria, LPA, bond etc. A paragraph explaining the selection procedure like screening test/GD etc, Explaining each round in brief

If there is one or more interview explain that also in brief. Then add the Questions that was asked in the interview sorting the questions

## **Aptitude**

Add relevant tips, portions to cover etc

## **Core Questions**

If possible sort by subject eg analog questions together then next sub.

## **IT related and Programming questions**

At the end add main topic to study

Add Additional resources at the end of this document (youtube link, blogs etc)

If possible add your name to the *contributors list* as shown below

John Doe(<college>)

*You can also add new companies also*



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# TCS (IT) 2021

## **TCS digital**

Online Aptitude Test consists of 2 parts

Part A

English -10 mins

Quantitative Aptitude-40 mins

Part B

Advance coding -60 mins

## **TCS Codevita**

Coding exam:

Test comprises of 6 coding questions (intermediate level)

Test duration -6 Hours

1. Self intro,design projects,problems faced during the project
2. Resume ( be thorough with it)
3. Managerial questions (how to handle situations)
4. General Hr questions
5. Online vs Classroom education(work from Home)

## **Core**

1. Brushless DC motor(special machines)
2. Difference between 3G and 4G wireless communication
3. Multiple access techniques like CDMA,TDMA etc.
4. Modulation schemes in communication
5. Relationship between electronics and communication

6. Relevance of digital signature
7. Which type of modulation is used for video transmission and why?

### **Coding**

1. How to generate random numbers in C
2. Data Types
3. Function
4. What is Object
5. Interface in Java
6. Array
7. Pointer
8. Database
9. Diff between C and C++
10. Diff between c and python
11. RDBMS
12. Data structures - Linked list
13. Sorting techniques
14. Static member functions in Java
15. Difference between Java and C++
16. JIT(Just in time compilation) in Java
17. Source code repository
18. Exception handling
19. Constructor in python
20. OOPs concepts (Inheritance, Polymorphism, Encapsulation, Abstraction)
21. Loops in python

# INFOSYS (IT) 2021

## Online Aptitude Test

There are 5 sections in the test:

### Section 1: Reasoning Ability (arithmetic & analytical)-(15 questions | 25 minutes)

1. Blood relation
2. Syllogism questions
3. Questions based on data sufficiency
4. Statement reasoning

### Section 2: Technical Ability (mathematical & logical)-(10 questions | 35 minutes)

1. Permutations & Combinations
2. Probability
3. Venn Diagrams
4. Profit & Loss
5. Crypto-arithmetic
6. Allegation or Mixture
7. Data Interpretation

### Section 3: Verbal Ability-(20 questions | 20 minutes)

1. Reading Comprehension
2. Fill in the Blanks
3. Para Jumbles
4. Analogy

### Section 4: Pseudo-code-(5 questions | 10 minutes)

Questions will be mostly on these topics:

1. C
2. C++
3. Java

### Section 5: Numerical Puzzle-(4 questions | 10 minutes)

## **Interview**

Id verification

1.introduction

2.project

3.HR based questions: why IT, What you can contribute,location shifting, Based on college activity mentioned in resume,and general questions related to present time

3.oops concept

4.Basic questions like swapping(with and without extra variables),prime numbers and even number printing (this question was modified to make iteration half and same output),pattern printing.

5.Simple theory questions in C

6.Basic electrical questions like what is transistor,transformer ( For EEE students, learn the basics of your core )

**Note: Interview was quite easy. They are looking at how confidently you answer the question rather than your knowledge.**



# MRF (core) 2021

1. Self introduction  
(Name ,college,school,internship,Project,DesignProject,Seminar Paper, Family)
2. They will interpret During the self intro mal in internship ,Project,Seminar So be Clear with that part(may ask your fav sub also,Why Btech<why sit for IT Company placement)
3. Not only the technical part of 2 but also will ask what are the alternatives in market ,whats is difference between them,Is it economical or not ,Social Impact etc
4. Details of Transformer Substation,Distribution substation
5. Transformer (stepup,stepdown),How to make the Primary voltage and secondary voltage of a transformer equal?
6. Transformer oil
7. Why use silica gel in transformer(absorb moisture in Air used for cooling(air natural))
8. Why do we connect neutral to the ground?
9. Differentiate ELCB MCB
10. Working of Clamp on meter ,How to measure DC with it
11. Flooring of Substation,Protection of machines
12. How to the terminals of a diode, Thyristor
13. SMPC,Variable Frequency Drives
14. Skin,piezoelectric Effects
15. Corona
16. What happens to the DC motor when the field coil burns?
17. Practical application of IGBT
18. Difference between ELCB, MCB, MCCB,RCCB
19. Which circuit breaker is used when a fault of phase neutral short circuit occurs?
20. What is stator inter turn protection?
21. Relays used in power transformers other than Buchholz relay?
22. Working principle of induction motor
23. Explain starting of 3-phase IM ?
24. Protection system for Transformer, Transmission line and DC generator ?
25. What is the use of CT and PT ?
26. If You are Explaining To an Answer TheY Will Not Interrupt If It's Wrong

Only At The End They SAY This Is Completely Wrong The Would Even Ask Answers With In This Wrong Concept To Explain As we Think It's Correct

### **Main topics**

- Machines
- Power Generation, Transmission and Protection
- Measurements
- Power Electronics
- Electric Drives

### **Things to be Noted ( Imp )**

- Internships
- Projects
- Resume ( Events you have conducted and basically everything )

# VVDN (Core) 2021

The screening test for vvdn consisted of a written round with MCQs, followed by two technical rounds. CTC offered 3.2 LPA with a bond of 3 years.

## Written test

This round is pretty simple if you have a thorough understanding of C programming, circuits and networks, and diode based questions. Just brush upon these concepts.

1. Questions on basic circuit analysis
2. Aptitude questions on puzzles (puzzle question mainly from geeks for geeks)
3. C programming questions on mainly pointers, strings and structures.
4. General questions like what pcb, bios, layers of networking etc.

## Technical round 1:

Questions asked to me were C programming questions.

1. Swap two numbers without a third variable.
2. pointer basic questions
3. data types and their memory
4. size of pointer on 32 bit Os.
5. basic definitions like structures, union, their differences.
6. questions on projects, things on resume.

## Technical round 2:

1. dynamic memory allocation.
2. linked list
3. stacks and queues.
4. Real life example of both
5. free(), realloc(), malloc()
6. difference between both

- 7.To find string 2 in string 1
- 8.Questions on project, resume (be thorough).

## Core Questions

1. SCR characteristics
2. MOSFET
3. Rectifiers
4. Basics of Diodes
5. Clipping and Clamping
6. BJT (different biasing,Differential amp)and Op Amp(adder,integrator inverting ,non inverting)
7. Flip Flop vs Latch
8.  $Q_{n+1}=...$
9. Rasing in jk, master slave
10. Half adder
11. Kmap
12. Varistor
13. Ge, si
14. Processors in your phone, Pc
15. Stack pointer
16. Program Counter
17. Design an Charger circuit 230v AC to 5vdc ie (Ac step down trans >Rectifier>filter>)
18. Circuit and working of different convertors(buck,boost...)
19. Explain about the project?
20. Types of diodes
21. Types of voltage regulators and explain
22. Embedded system?
23. Working of led, zener diode
24. Name some microprocessors

## Programming

1. Bitwise OR

2. Pointers
3. Storage Classes (auto ...)
4. Program to Swap 2 variable without using an 3rd variable
5. Program to Reverse a string in C
6. Program to find which greatest number
7. Function Call by ref, call by value
8. difference between i++ and ++i also a& and a&&
9. Array
- 10.Data types and memory for them
- 11.Oops with daily life example
- 12.Struct and union

# WABCO(core) 2021

Simple mathematical problems-like 0.06%of 150 - (5min, 20 questions)

Alphabetical series problems-10questions-15min

Pattern finding-10 ques-14min

Sequence finding- 7ques - 10min

Technical-20ques-15min

## **Round 1- GD**

Two topics will be given which are socially relevant. The participants have to discuss and select one topic. The discussion will continue for 15 mins

## **Round 2**

The selected candidates from GD will have an online test. The online test is relatively quite simple and consists of questions from very simple maths and basic branch specific questions. Speed is the deciding factor.

## **Round 3- Technical interview**

Candidates who clear the online test have a technical round where things related to their project, branch related and also coding questions will be asked. Basic questions of C/C++ was also asked

Company related products questions were also asked.

While doing the coding questions, they asked to do the programs using pointers and asked many questions related to the pointer's syntax.

## **Round 4- HR interview**

They'll want to know if we are genuinely interested and would like to work for some years. Make sure that you can convince them of every question. For instance, they'll ask if you have any issue about shifting to a different place (mostly Chennai) for work or if you are interested in going for Mtech anytime soon.

# Oracle (IT) 2021

(No bond)

## 1st round

- Logical reasoning
- Verbal ability
- Quantitative ability
- Write a passage to check our English proficiency (eg what is the best thing about oracle)
- Coding rounds (MCQ)
- Flowchart deduction(CS)
- Questions based on OS, DBMS, OS layers, TCP/IP, trees, graphs, etc.

## Interview round 1

Introduce yourself

Technical questions as per resume. They'll ask you to tell some instances where you have exhibited the skills you have mentioned in the resume.

Basic questions like

- 1) Difference between c and c++, c++ and java
- 2) Why header files are used
- 3) Difference between cin and scanf
- 4) oop concepts explanation with real life example
- 5) Static variable
- 6) database concepts ,normalisation

Write the program .

Basic programming questions like bubble sort, fibonacci series printing, prime number

Why did you choose IT over core company?

Are you willing to relocate?

## Interview round 2

Questions regarding project

Programming questions (mostly harder and more time consuming than the 1st round)

***Note : The interviewer focuses on checking if we have the logic more than the syntax.  
You'll be asked to explain your logic at the end of the time allotted to do the program.***

### **Interview round 3**

human resource

What is the job which you have applied for?

What is it that makes you special among the selected students?

What did you all prepare for attending this interview?



# ZS Associates (DAA Role) 2021

The recruitment process consists of a three stage online test followed by a case interview test, a case interview and an EBI Fit- Behavioural interview. Each stage serves as an elimination round. The online test is audio and video proctored. Most sites rank ZS interviews in the top 10 of the world's toughest interviews. So preparation is the key.

## **Online Test - Round 1 (Aptitude)**

The first stage of the online tests consisted of aptitude questions from a wide range of topics, but which could be solved without any particular formulas or practice if thought out carefully.

## **Online Test - Round 2 (Problem Solving Deep Dive(PSDD) Round)**

It consisted of a case study with data given based on which multiple choice questions are to be answered. There were just four questions and 20 minutes to solve. Multiple options seemed correct. Choose which one seems best.

## **Online Test - Round 3 (TBI round)**

It is an online proctored behavioural interview where you are supposed to upload short video clips with duration upto 3 minutes answering behavioural questions which are displayed as prompts on the screen. One question on approximation was also asked.

After clearing the online test, the next part of the process will take place on another day.

## **Interview round 1 - Case Study Assessment**

It is again a video proctored online assessment, where you will be required to solve a case study about which you will be briefed on prior to the commencement of the round. The questions are descriptive in nature and NOT multiple choice. The case study consists of 10 pages (including the front cover). It will contain descriptions, graphs, tables, etc. Every question would require us to do the math by utilizing all the information provided.

### **Interview round 1.1 - Case Study Interview**

This is an actual 1-on-1 interview with an interviewer with whom you will go through and defend the answers that you had uploaded during the Case Study Assessment round. Might ask new questions based on the case study or generally. After the case solving, the interviewer might ask a guesstimate problem - For eg. Calculate the number of ping pong balls that can be fit inside an airplane.

### **Interview round 2 - Fit + Behavioural Interview round**

In this round you will meet a 'ZS Leader' and will be asked behavioural questions which you might have to answer describing experiences from your own life. Specifics from your resume might also be discussed. You might get asked puzzles or guesstimate questions again. Your future at the company will also be discussed.

This is the end of the recruitment process at the end of which, if you are successful, will get a job offer to work at ZS Associates as a Decision Analytics Associate.

**Note :** All the stages mentioned above are elimination rounds and only on clearing the respective rounds will you move on to the next.

# Key Value Systems 2021

Type: Core

Package: 5.7 LPA

Eligibility: CSE, Upto 2 standing arrears

Website: <https://keyvalue.systems>

## **Round 1: MCQ and Coding**

It consisted of 30 MCQ questions on Data Structures and Algorithms and a few questions from OS and basic logical reasoning with negative marking (+4 and -1). Covered almost all topics.

Focus on:

1. Finding output of C++ functions.
2. Finding complexity of functions.
3. Questions related to linked lists.
  - a. Which is the best sorting algorithm for a linked list.
4. Standard algorithms in sorting, dynamic programming, graph theory
  - a. Kadane's algorithm
5. Questions related to trees and binary search trees
  - a. Find the inorder, preorder and postorder traversals.
6. Others:
  - a. Best data structure for a phone book.
  - b. Which data structure is used to convert a recursion to an iteration.
  - c. What happens when the time slice is reduced in a round robin.

**Coding:** Solve two questions in 1 hour. Some of the questions that were asked are:

1. Given a string, convert the string as shown in the example.  
occurrence ==> o1c3u1r1a1n1e1  
(Letter followed by the frequency)
2. Given an array of integers, find the value that is farthest from zero, when represented on the number line. If more than one of such values exists, print the smaller one.

Example:

Sample input: 6 28 5 0 4 -28

Sample output: -28

3. Given an array of integers, find the number of elements greater than an element h. (Use binary search).
4. You are given heights of two people, h1 and h2 and are allowed to perform the following three operations:
  - a. Add the height of the first person with his initial height
  - b. Add the height of the second person with his initial height
  - c. Add the height of the first and second person with their initial heights respectively.

Find the minimum number of operations to make their heights equal.

For example:

Sample input: 4 6

Sample output: 2 (operation c and operation a)

## **Round 2: Coding Interview**

The interview begins with a brief introduction and a general discussion on the resume and the different projects done. It is followed by multiple coding questions (2 - 3) and are solved in a Google doc by describing the thought process.

1. Given a string S, reverse the string without changing the locations of the special characters.  
     ABC\$abc& ==> cba\$CBA&
2. Given three arrays. Display all elements common to three arrays in  $O(n)$ .
3. Given the heights of a few buildings in an array, find the heights of the buildings such that all the buildings on the right of it are smaller than itself. [  $O(n)$  ]
4. Code to print all the prime numbers upto a number efficiently ( check sieve of eratosthenes)
5. Check for linked list palindrome without a stack
6. Print the nth number from last in a linked list in one traversal.set(a)
7. Print the middle element in a linked list in one traversal.
8. Find complexity of recursive function given( question dependent)

NOTE: Focus on problems related to linked lists.

## **Round 3: Coding Interview**

Similar to the previous round, there will be a brief discussion on the resume and the different projects before moving on to the coding section.

1. Given a number S, and K chances, convert the string into the largest palindrome.

S = 3321, K = 2 ==> 3333

S = 123, K = 2 ==> 929

S = 123, K = 10 ==> 999

2. Find the kth element from last in a linked list.
3. <https://www.geeksforgeeks.org/container-with-most-water/>.
4. Given two sorted arrays, find out the median of the values consisting of both the arrays without merging the arrays in O(n).
5. Balance the brackets and print the status. Eg: [{}] is balanced.
6. Given a binary tree T and a level L, return the result of applying the following operation on the elements of the tree at level L.

$a_1 + a_2 - a_3 + a_4 - a_5 + \dots$

For example if the tree was

```
      1
     / \
    2   3
   / \ / \
  4  5 6  7
```

For L = 1, answer is 1

For L = 2, answer is 2 + 3

For L = 3, answer is 4 + 5 - 6 + 7

#### **Round 4: HR**

An interactive session with the founder or co-founder with discussion on projects, and general HR questions.

# KeyValue Systems 2022

Type: Core

Package: 7.2 CTC

Eligibility: CSE, Upto 2 standing arrears

Website: <https://keyvalue.systems>

## **Round 1: MCQ and Coding**

Some general aptitude, and basic questions in core subjects of CS

**Coding:** Solve two questions in 1 hour. Some of the questions that were asked are:

- <https://www.hackerearth.com/problem/algorithm/strictly-increasing-sequence-232f4862-80da6038/>
- Get the maximum of  $A_i + A_j * A_k$  for all  $A_i < A_j < A_k$  and  $i < j < k$  in array A

## **Round 2: Coding Interview**

The interview begins with a brief introduction and a general discussion on the resume and the different projects done. It is followed by multiple coding questions (2 - 3) and are solved in a Google doc by describing the thought process.

Be confident with OOPs - properties, different types of inheritance example, polymorphism, abstract vs interface in Java (Can ask related topics in java or other languages based on your interest)

1. Print nth fibonacci number.
2. Check if a given string is a permutation of a palindrome.
3. Implement a stack - Push, pop and minimum element. Every operation in  $O(1)$ .
4. Second largest element in a BST.
5. Merge two sorted arrays into one array in  $O(n+m)$
6. Given an array of positive integers, print first occurring largest pair. Print -1 if no such pair exists. Must read the array only once.

Eg: input: 3 2 5 7 1 9 8

Output:

(3, 5), (2, 5), (5, 7), (1, 9), (9, -1), (8, -1)

Hint: Stack

7. Check if 2 strings are anagrams

8. Puzzle question - you have 8L,5L and 3L bottles. Use this to measure exactly 4L of water
9. Questions about SQL and some SQL queries
10. 4 rules of oop
11. Given an array of integers of size n and a value k, find the subarray of length k with maximum average
12. .
13. [Sort an array in wave form - GeeksforGeeks](#)
14. Given integer array nums, return the third maximum number in this array. If the third maximum does not exist, return the maximum number.

Input: nums = [3,2,1]

Output: 1

Explanation: The third maximum is 1.

Input: nums = [1,2]

Output: 2

Explanation: The third maximum does not exist, so the maximum (2) is returned instead.

Input: nums = [2,2,3,1]

Output: 1

Explanation: Note that the third maximum here means the third maximum distinct number.

Both numbers with value 2 are both considered as second maximum.

```
14.CREATE TABLE customers (
    name          VARCHAR(255),
    industry      VARCHAR(255),
    project1_id   INT(6),
    project1_feedback TEXT,
    project2_id   INT(6),
    project2_feedback TEXT,
    contact_person_id INT(6),
    contact_person_and_role VARCHAR(300),
    phone_number  VARCHAR(12),
    address       VARCHAR(255),
    city          VARCHAR(255),
    zip           VARCHAR(5)
);
```

Above table is not normalised. Please make the necessary changes to normalise the table. You can create/remove new tables/attributes etc.

Also make changes to include address details for both customer and contact

### **Round 3: Coding Interview**

The interview begins with a brief introduction and a general discussion on the resume and the different projects done. Coding, Database design(based on situation), OOPs(May ask in Round 1), SQL Query (Must be thorough with sub queries, group by having etc...)

1. Linked List reversal
2. Inorder traversal of binary tree
3. Mirror of a binary tree
4. Given an array, print a triplet in the array which results in a given sum in the  $O(n)$
5. Length of Longest consecutive integers in a tree
6. <https://www.geeksforgeeks.org/alternative-sorting/>
7. [Given a string, find its first non-repeating character - GeeksforGeeks](#)
8. [Python | Group Anagrams from given list - GeeksforGeeks](#)
9. [Level Order Binary Tree Traversal - GeeksforGeeks](#)

### **Round 4: HR**

An interactive session with the founder or co-founder or hr manager with discussion on projects, and general HR questions.



# Baton Systems 2021

Type: Core

Package: 5.5 LPA

Eligibility: CSE, EC, No standing arrears

Website: <https://batonsystems.com>

## Round 1: MCQ

General aptitude questions with no negative marking. Total time: 60 minutes.

## Round 2: Coding

Proctored coding round to solve three questions with more consideration on best practices, code formatting, comments for shortlisting.

1. Write a program to find the sum of digits of a given number until the sum becomes a single digit.
2. Given two words as inputs, write a program to confirm whether they are an anagram.
3. An OOP program to help an online customer find the cheapest hotel for a given set of dates.

## Round 3: Technical Interview

A one hour interview with a general discussion on the different projects, the technologies used, challenges faced, known and preferred programming languages (Baton Systems works in Java).

Learn about the company for this round. General discussion on the company requires knowledge about the company.

## Round 4: Technical + HR

An half an hour interactive session with the director of program management and the head of engineering. Detailed discussion on projects. General HR questions. Checking if you are willing to relocate, adaptable to the new technologies.

# Baton Systems 2022

Type: Core

Package: 7-8 LPA and Stock points

Eligibility: CSE, EC, No standing arrears

Website: <https://batonsystems.com>

## Round 1: MCQ

General aptitude questions, and some Linux commands(5 questions), SQL, C/C++/Java code output prediction, error detection - with no negative marking. Total time: 60 minutes.

## Round 2: Coding

Proctored coding round to solve three questions with more consideration on best practices, code formatting, comments for shortlisting.

1. Print pascal's triangle given level  
For L = 4 output: `[[1], [1, 1], [1, 2, 1], [1, 3, 3, 1]]`
2. Remove duplicates from string and print smallest possible lexicographical order  
*Input:* bcabc  
*Output:* abc  
*Input:* cbacdbcb  
*Output:* acdb (<- Not a typo)
3. Design a receipt generation software - use classes, functions etc... to code  
They will provide information like X% for food, books, medicine etc ... Y% for imported goods. (Concentrate on coding style)  
*Input format:*  
Product:quantity:price ( for n inputs)  
*Output:*  
product: quantity:price with tax (for n inputs)  
Total tax  
Total

## Round 3: Technical Interview

There wasn't any technical interview this year

#### Round 4: Technical + HR

Just an interactive round. Speaking about their system, awards, etc... Just prepare well with their website. If possible make connections with employees (seniors) at Baton on LinkedIn which is considered as a plus. Try to make your aim inclined with the baton system.

# IQVIA 2021

**Package: 5.26 LPA (6 months Internship)**

## **ROUND 1:**

There will be two test:

1. Aptitude test
2. Technical test (There will be 2 questions to solve based on programming skills)

## **ROUND 2:**

### **TECHNICAL INTERVIEW:**

1. Self Introduction
2. About Project
3. Latest Current Affairs
4. Interviewer would ask us aptitude questions which are asked to test our logical thinking.
5. Programming languages.
6. Difference between final and finally
7. algorithm to compress `aaaabbbdddddrr` to the form `a4b2d7r1`.([https://youtu.be/5co5Gvp\\_-S0](https://youtu.be/5co5Gvp_-S0))

## **ROUND 3:**

### **HR INTERVIEW**

1. Self Introduction
2. About Project
3. About iqvia
4. General HR questions

# SAINT GOBAIN (SEFPRO) 2021

Graduate Engineer Trainee(Core)

Branches interviewed in 2021: EEE & Mechanical

Minimum CGPA : 7.0, No history of arrear allowed

Bond 2 years, Training period 1 year

CTC : 5.04

## **ROUND 1 : ONLINE APTITUDE TEST**

The test had 4 sections. First two were pattern related questions. Third section was numerical and the 4th section was technical. The technical section contains questions from thermodynamics, 12th level physics questions and some electrical related questions.

## **ROUND 2 : GD**

The students selected from the first round split into different groups each of 6 or 7 students of the same branch. Each group had students from different colleges. Online GD was conducted through microsoft teams. The process was different from the conventional GD. A topic was given and 10 minutes were allotted to think about it. Whoever is ready could raise their hands in teams. Everyone was given a chance to speak in the order in which they raised their hands. After that everyone was asked to summarise the discussion. Then an open discussion was conducted. The entire process took about 1 hour.

TOPICS : E-learning, Is India Ready for EV, Can artificial intelligence replace human intelligence, Open text exams pros and cons.

## **ROUND 3 : TECHNICAL INTERVIEW( Branch : Electrical)**

The interview panel had one HR personnel and a senior engineer. The questions vary according to the panel. Transformers, induction motors, protection schemes, drives, motors, generators etc. were some of the common questions in Electrical. Questions about academic projects were also asked. Some practical questions like how much voltage is needed to give a shock, what is the difference between electrical and electronics, can you define a boundary between electrical and electronics were asked. Some panels also asked about extracurricular activities.

Basically they give very much importance to practical knowledge and thinking capacity. In subject questions, they may ask anything; drives, transformers, induction motors, starting etc. are some important topics.

#### **ROUND 4:FINAL INTERVIEW( Branch : Electrical)**

Even though they said it was an HR and Business head interview, 80 percent of the questions were technical. They asked for an introduction including the family and education background.

#### **Technical Questions :**

1. Project
2. Favourite subject - machines
3. Tell about what you learned in machines
4. What are the two types of induction motors
5. What is the magnitude of Starting current in motors
6. Application of Slip ring and squirrel cage induction motors
7. Braking of induction motor
8. What do you know about Transformers
9. Power transformer : working, rating
10. Transformer protection- methods
11. Differential protection and buchholz relay working
12. What is the use of silica gel in transformer
13. What is SF6 ..where is it used in transformer -CB
14. Types of CB and application of each type
15. CT, PT and their use
16. Supply voltage in India
17. National grid transmission voltage
18. Kerala state transmission voltage
19. Distribution voltage for industries'll

#### **HR Questions**

1. Are u willing to relocate
2. Will you choose Mtech or MBA for higher studies
3. If you are given a chance what will you choose- hard core electrical or plc and automation related..

4. Where do you think u should be in 5 years- crisp answer
5. Are you comfortable to socialize
6. This is not an office job, so will you be comfortable



# QUEST GLOBAL 2021

Type: IT

Package: 3 LPA

Eligibility: CSE, EEE, EC (No standing arrears)

## **Round 1: Online Aptitude Test**

Test duration: 60min

Marking Scheme: +1 for correct and 0 for incorrect or unattempted

Total Questions: 60

- Section 1: Verbal Ability – 12 Questions
- Section 2: Quantitative – 12 Questions
- Section 3: Analytical – 24 Questions
- Section 4: Technical (domain test) – 12 Questions

## **Round 2: Group Discussion**

A relevant topic will be given to a group of students and each one will have to talk about their views on the topic for 1 minute. Candidates can either talk about the topic when they are given a chance or when they are ready, after asking for permission. The discussion will continue for around 30 minutes.

## **Round 3: Technical Interview**

During the interview the candidate will be asked for a self-introduction followed by questions related to their main project and mini project. The candidate's favourite subject will be asked and the questions that follow will be based on that subject.

Interview questions also depend upon the panel. Sometimes questions related to your domain as well as programming questions will be given equal weightage and sometimes only a few domain questions will be asked. Questions related to operating systems, processors etc. were asked.

The programming questions asked includes:

- Fibonacci series
- Swapping two variables without using a third variable
- Check if a number is prime
- Number of words in a sentence
- Array sorting
- Finding largest, second largest element in the array etc.
- Patterns
- Palindrome
- pointers

Other questions like 'if you are asked to design a refrigerator or washing machine, what will you do' were asked.

#### **Round 4: HR Interview**

- Tell me something about yourself which is not there in the resume
- Why Quest Global
- Hobbies and interests
- Situation based questions like if you are given a task to be completed either as a group or individually, such that if you do it as a group you will be able to complete it in time but your individual score would be reduced and if you do it individually, your individual scores could be improved but you might not finish the work in time. What would you do?
- Smart work or hard work
- Is a service bond of 2 years okay for you?
- Toughest person you had to deal with in your life
- A difficult situation you have tackled before
- Why is this job important for you?
- Qualities of a team leader

# DELOITTE 2021

## Round 1 - Online Aptitude Test

Normal aptitude exam. Topics ranged from English, Mathematics and Logical Reasoning. Did not have CS specific questions.

## Round 2 - JAM

Just A Minute(JAM) is basically a 1 minute extempore(topic given just before the speech). Video+Audio and thus, bandwidth needs to be sufficient.

You will be given a topic and you have to speak about it for 1 minute(can or cannot use 30sec to prepare which does not affect the score(as per the evaluator).

Selected candidates from the aptitude test are broken down into groups and the session is held for a group. The evaluator will have a namelist and the order goes according to that list. The person who is called can take a number and a topic associated with that particular number is given. May or may not use 30 sec for preparation. After that give the talk for about 1 minute. You can speak for two minutes out of which speaking for at least 1 min is compulsory. Once the time is up, the evaluator will signal you to stop.

**Topics** - Cryptocurrency, Detection of fake news from online media, How blockchain can be implemented to the current tax system, AI and ML in sports, Digitization of Healthcare, AR and VR in education, Online classes during Covid, Online exams, Problems faced by Renewable Sources, online advertisements etc.

## Round 3 - Interview

Questions about resume and CS related questions are seen. It varies according to the interviewer, but it's always better to prepare than wait for Lady Luck.

1. Introduce yourself
2. Why <your> branch
3. Questions related to resume- Will include technical
4. Extra curricular work- (Quite important, need to stress skills which you've picked up aside from regular coursework, eg:Python,ML, cloud computing, Raspberry Pi etc)
5. Bubble sort - any language

6. Largest number in an array - any language
7. Palindrome - any language
8. Duplicates in an array- any language.
9. SQL basics
10. What is your definition of success?
11. Explain project life cycle.
12. Challenge you've faced while working with a team and how you overcame it
13. Intersection of two arrays (list of distinct elements present in both the arrays)

# IMPELSYS 2021

## **Round 1 - Online Aptitude Test**

The aptitude test was held in two sets

The first set consisted of average quantitative questions, language skills questions and logical reasoning questions.

The second set consisted of technical questions related to computer science mainly from data structures and algorithms. The questions included understanding and/or completing program codes related to linked lists, OOP etc.

## **Round 2 - Extempore and GD**

This round was held as online meetings each with about six candidates and two or three people from the recruitment team.

First extempore was held(extempore means speech to be given with the speech topic given just 1 minute before (preparation time). Extempore was done in two rounds with each candidate asked to give two speeches for two different topics individually.

Next GD was conducted, again in two rounds. First a topic was given and the candidates were to speak on it and then the second topic was given for the next cycle of GD.

The topics for extempore and GD were common GD topics such as: effect of junk food, importance of work life balance, impact of materialism, impact of movies.

## **Round 3 - Technical Interview**

This round was a one on one interview between the candidate and the person from the recruitment team.

First an introduction about the candidate was asked. Then, questions were asked based on computer science fields, like basic concepts of networking, the basic working of the Internet, what is known about linked lists etc.

Then questions were asked to understand the basic IQ, problem solving skills and thought process of the candidate. Basic mathematical problem solving skills questions were asked.

Further simple questions were asked to know the interest of the candidate in taking this given job, in this given field.

## **Round 4 - Telephonic Interview**

The final round was a telephonic interview with the company person. The questions include

- What do you know about the company
- What do you know about the company's culture employees etc
- Why do you want this job
- About your family and yourself

# PWC AC (Core) 2021

Position: Associate

Package: 6 LPA

Eligibility: CGPA 7+ out of 10.(Any Circuit Branches)

Process: Online Test, Technical, Leadership & HR discussions.

## **Round 1 - Online Aptitude Test**

Duration- 1 hour 15 minutes

This is a MCQ round consist of three sections-

1. Aptitude
2. SQL
3. Java - Consist mainly java object oriented programming questions and output prediction.

## **Round 2 - Interview**

This is a 30 minute interview with a senior manager of the company.

1. Introduce Yourself
2. What do you know about pwc?
3. About family?
4. What is your dream after completing B.Tech?
5. About the Project?
6. Two favourite subjects?
7. What is cloud computing? Advantages and disadvantages?
8. Why did you join B.Tech? Is it your decision?
9. Scenario based question - If there are two different positions in the company, if you and your friend wish to join the same position. How do you tackle this situation?
10. Questions related to resume

## **Round 3 - HR Interview**

This is a 7-10 minute interview with one of the Directors of Pwc.-Asked general HR questions and checking willing to relocate

1. Tell me about yourself.
2. Tell me your strengths and weaknesses
3. Tell me a situation where one of your friends told you that you are wrong?



# Market Simplified (IT) 2021

Position: Graduate Engineer Trainee

Package: 3.7 LPA

## Round 1:- Online Test

- Includes multiple choice questions and coding questions
- 15 MCQ's and 5 coding questions
- 1 hour of time.
- MCQ's are from the basics of computer science.
- Includes pseudo codes as well.
- Coding questions include generating fibonacci series, reverse a string, find maximum of given numbers, check whether the given number is prime or not, find sum of given numbers and program to check if a password satisfies some given conditions.

## Round 2:- Interview

- Introduce yourself.
- Basic questions related to topics which are mentioned in the resume(eg:- machine learning).
- Basic coding questions similar to the type of questions seen in online test but we have to share the window and explain the code.(2-3 qns)
- Have to code in multiple languages if more than one is mentioned in the resume.

## Round 3:- Interview(Technical and HR)

Interview with a senior manager of the company.

- Introduce yourself.
- Basic questions from oops concepts, memory allocation in python, constructors and destructors, data types in python,..etc.(I've mentioned python in resume)
- Whether interested in higher studies.
- Why an IT job?

# UST GLOBAL (IT) 2021

## Round 1 - Online test

- Aptitude
- Reasoning
- English
- Coding

## Round 2 - Technical Interview

Technical interview was about 20 mins. It was mixed with both technical and HR questions

- Introduction
- Project- algorithm
- There were some electrical based questions like what is transformer, diode, diode characteristics etc.
- Plot of a book which I recently read.
- About internships.
- Basics of networking
- Told me to write the program for reversing a 3 digit number.
- Why did you select engineering?

After these there was a telephonic interview, They asked :

- Introduce yourself
- Project

It was a 5-7 minute conversation.

# ENVESTNET(CORE) 2021

CTC:5.8 LPA

POST:PRODUCT DEVELOPMENT ENGINEER

LOCATION:Thiruvananthapuram

Bond:2 years

## **ROUND 1-ONLINE TEST**

Topics covered were quantitative aptitude,logical reasoning,programming round.In the programming round,there were 2 questions.Based on the cutoff decided,few were shortlisted for the online interview round.

## **ROUND 2-ONLINE INTERVIEW-TECHNICAL AND HR**

Before the online interview round,they told us to take a psychometric test.It was for analysing our personality and it was not taken into consideration for the selection process.There were 2 interviews of approximately 1 hour each.If you clear the technical round only you are allowed to proceed to the next step.

In the technical round ,they asked in detail about the project.It is good to be thorough with the details of the main project.They asked even the minute details.Even if you don't know or fail to recollect,tell them honestly.Then they asked the basic concepts of networking,how internet works,web server etc.Keep a calm and cool attitude as it matters the most.Be cheerful and answer honestly.They also gave a programming question and asked us to type the answer on the screen which was also visible to them.It is always better to explain your thought process and make the question clear as it gives you brownie points.If you know java it is a plus.

After 10 minutes, they informed that I was selected for HR round. In HR round they ask basic questions like why you are interested in IT field and you need to give them believable explanations. Also they asked questions to test my personality like my weakness but in a very indirect way. This round lasted for 40 minutes. After a week, they informed us about the final selection. Just a tip, don't ever underestimate yourself and keep on working hard. Cheers!

# Helium Consultancies PVT LTD

## (Core) 2021

CTC:4.5 LPA

POST:ASSOCIATE ENGINEER

LOCATION:Pune

Bond:3 years/1.2 Lakh

Ds

1. Details of projects
2. Skills
3. Realistic and Innovative Problem solving
4. Interested fields
5. Technologies in IoT

HR

1. Academic performance
2. Attitude
3. Work atmosphere
4. Mental strength

# RCKR (IT) 2021

## 1st round

- Solve a programming problem given in the site.
- No time limit.
- Along with answer attach resume

## 2nd round (Coding interview) - about 1 hour

- Live coding interview.
- Can choose any programming language.
- Questions are from topics like String manipulation, Array manipulation, Sorting, searching, number theory.
- Example:-
  - Run length encoding
  - Find frequency of number in a given list
    - Input: [1, 1, 2, 2, 2, 2, 3], output: 1:2, 2:4, 3:1

## 3rd round (Technical Interview)- about 1 hour

- Questions are based on topics mentioned in the resume.
- Explanation about any CS related projects.
- Explain how the problem in the first round was solved.

# South Indian Bank (Probationary Officer) 2021

CTC : 10 LPA

BOND : 3 years

## Round 1 : Screening Test

- This MCQ type test consists of quantitative aptitude, logical reasoning, English,GK and some banking awareness questions.
- You need to score at least above 60 percentage.and there will be sectional cutoff also.

## Round 2 : Interview

- Self introduction for 1 minute
- What is cross selling
- Name any 5 wealthiest people from your city
- How many SIB branches are there in Maharashtra
- How many deputy governors are there in RBI
- Which section will you choose; marketing,sales,loan ,clearing....
- If you are in the marketing section,whom do you prefer to approach; a person who is not banking or a person who is other banking?why?
- Are you willing to relocate anywhere in India?

# O/E/N India Limited

CTC : 2.5 LPA

BOND : 1 year

## Round 1 : Screening Test

- This MCQ type test consists of only core related questions from analogue electronics, machines, digital electronics etc.
- The assessment was simple and contained only basic level questions

## Round 2 : GD

- \_\_The GD was 20 minutes long and was conducted after the screening test
- GD was simple and was related to current topics rather than technical topics
- Starting a GD could be a of great advantage

## Round 2 : Interview

- The interview was face face or offline and was conducted in mulanthuruthi at their plant
- There would be 6 panelist to ask questions related to technical as well as HR.
- Self introduction for 2 minute
- Then the questions will be based on one's resume
- Be thorough with one's resume
- They will ask to explain the project well
- And the technical questions will be followed from the project
- Hr questions are basic like where do you see yourself in 5 years
- Why should we hire you



# TATA ELXSI(Off Campus CORE)

Position: EMBEDDED PRODUCT DEVELOPER

Package: 3.5 LPA

No bond

## Round 1:- Online Test

- Includes 10 Multiple questions based on C, Java script , Java, C++(even if you don't know these topics well, logic can be used to solve the questions)
- There are 4 coding questions
- The coding questions cannot be attempted in Python
- C++ would be more easy to do the coding questions
- The coding questions are simple but the overall program writing could be tricky
- 

## Round 2:- Interview(Technical)

- Introduce yourself.
- Be thorough with your resume.
- Basic questions related to topics which are mentioned in the resume(eg:- Python).
- You should be thorough with your main project or mini project
- Basic coding questions similar and basic question related to C, Embedded C, Embedded Systems(eg:- what is embedded C, dangling pointer , interrupt service routine)

## Round 3:- Interview( HR)

- 
- Introduce yourself.
- More like a conversation and question can happen both ways
- Be thorough about the company(like services , business units...etc)
- General Hr questions like where do you see yourself in 5 years
- Are you willing to further take forward your studies(Always say no even if you are planning to do Masters)
- Just be confident in what you say this interview is to test your social skills and communication skills

# ECS FIN.(IT)

Position: ASSOCIATE ENGINEER

Package: 3.3 LPA

## Round 1:- Online Test

- 20 mathematical aptitude MCQS
- Cannot use pen or paper, on-screen calculator provided
- Simple to moderate difficulty

## Round 2:- Interview

- Interview panel of four : 3 technical & 1 HR
- Self intro
- Detailed questions based on hobbies
- OOPS concepts with examples
- Access modifiers, constructor and similar definitions
- Solve a logical question
- Basic questions based on btech stream
- Asked a few biology definitions, since I took bio in 12th
- Back to basic hr questions

# CoreEL (2022)

Position : Design engineer  
Type : Core  
Package : 4 LPA  
Bond : 3 years  
Eligibility : ECE

## Round 1 :- Online Test

- 30 MCQs :
  - 1 mark for correct answer , -1 mark for wrong answer
- 9 subjective questions with higher weighage
- Digital electronics
  - Solving k-map
  - Design of FSM for calculating modulo-5 of a bitstream
  - Finding output waveforms
  - Minimum number of NAND gates required to implement some function
- Analog electronics
  - BJT circuits
  - Network analysis
  - Theory
- Microcontrollers
  - Given a circuit with RAM, flash, find the memory addresses mapped to the RAM and flash
  - Theory
- Communication
  - Find modulation index from efficiency
  - Theory questions
- Quantitative
  - Standard questions
- General science
  - Questions from physics and math at 12th level
- Rough work and answers to subjective questions to be scanned and uploaded

## Round 2 :- Group discussion (offline)

- Topic : negative marking in MCQ exams
- Did not eliminate anybody

## Round 3 :- One-to-one interview (technical + HR)

- Informal discussion at start about college, reason for choosing it and the branch, etc
- Clubs and activities in college
- Projects
  - Checked basic details of arduino/software projects, were not interested when they realized i just used ready made libraries for them
  - Went deeper into the verilog project.
  - Asked to draw block diagram of project
  - Write code for part of it
- Was given clock and input signals, and was asked to draw output for a D flip flop
- Was given a waveform to its side and asked to design logic for it
- Gave another 2 waveforms and asked to modify the design for them
- Write verilog code for the above circuits
- Asked about MTech, MS, MBA plans

# Additional Resources

1. <https://www.youtube.com/playlist?list=PLUDwpEzHYYLv0iZsTx4dm-v-icoVXRqrz>
2. <https://www.leadingedgetech.co.uk/it-services/it-consultancy-services/cloud-computing/what-are-the-types-of-cloud-computing/>
3. [https://youtube.com/c/EasyElectronics\\_25](https://youtube.com/c/EasyElectronics_25)
4. <https://www.dropbox.com/sh/yl6ak5f25xz8yiw/AAD2U04UwkilqbPjqU7tcERa?dl=0>
5. To know more about building your resume do Google the following  
[harvard college resume filetype:pdf](#)  
[mit career handbook filetype:pdf](#)
6. From the search results use the pdf which suits you
7. Important information for placements:
- 8.
9. Top 10 Sites for your career:
10. 1. LinkedIn
11. 2. Indeed
12. 3. Naukri
13. 4. Cocubes
14. 5. JobBait
15. 6. Careercloud
16. 7. Dice
17. 8. CareerBuilder
18. 9. Jibberjobber
19. 10. Glassdoor

- 20.
21. 10 Tech Skills in demand:
22. 1. Machine Learning
23. 2. Mobile Development
24. 3. SEO/SEM Marketing
25. 4. Data Visualization
26. 5. Data Engineering
27. 6. UI/UX Design
28. 7. Cyber-security
29. 8. Cloud Computing/AWS
30. 9. Blockchain
31. 10. IOT
- 32.
33. 10. Sites for Free Online Education:
34. 1. Coursera
35. 2. edX
36. 3. Udemy
37. 4. MIT OpenCourseWare
38. 5. Stanford Online
39. 6. iTunesU Free Courses
40. 7. Codecademy
41. 8. ict iitr
42. 9. ict iitk
43. 10. NPTEL
- 44.
45. 10 Sites to learn Excel for free:
46. 1. Microsoft Excel Help Center
47. 2. Excel Exposure
48. 3. Chandoo
49. 4. Excel Central
50. 5. Contextures
51. 6. Excel Hero b.
52. 7. Mr. Excel

53. 8. Improve Your Excel

54. 9. Excel Easy

55. 10. Excel Jet

56.

- 10 Sites to review your resume for free:

- 1. Zety Resume Builder

- 2. Resumonk

- 3. Resume dot com

- 4. VisualCV

- 5. Cvmaker

- 6. ResumUP

- 7. Resume Genius

- 8. Resume builder

- 9. Resume Baking

- 10. Enhance

57.

58. 10 Sites for Interview Preparation:

- 1.HackerRank

- 2.Hacker Earth

- 3. Kaggle

- 4.Leetcode

- 5.Geeksforgeeks

- 6.Ambitionbox

- 7. AceTheInterview

- 8. Gainlo

- 9. Careercup

- 10. Codercareer

59. **before an online interview**

[https://www.linkedin.com/posts/akshaymarch7\\_smilededekedkho-activity-6827836248736968704-uZSD](https://www.linkedin.com/posts/akshaymarch7_smilededekedkho-activity-6827836248736968704-uZSD)

60. <https://www.indiabix.com/>

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