ANALYST PLACEMENT PREPARATION

Overview

- **Consolidated Drive Link for preparation.**

1. Before you begin the preparation process, you should be familiar with the pattern. Most of the companies will test you on your **aptitude** and **technical skills**, the former being the major chunk.
2. Aptitude can be broken down into **three parts**:
    i. Quantitative Aptitude (QA)
    ii. Data Interpretation and Logical Reasoning (DI and LR)
    iii. Verbal Ability and Reading Comprehension (VA and RC)
3. In most cases, **Quantitative Aptitude** forms the major portion of the test. Each and every topic of it should be dealt with utmost seriousness. Questions are asked from **topics** like:
    i. Arithmetic
    ii. Algebra
    iii. Number System
    iv. Functions
    v. Statistics and Probability
    vi. Geometry and Trigonometry
4. **Speed and accuracy** matter the most in some of the easy tests (EXL, Quantiphi etc) so make sure you have enough practice for Limited Time Easy Questions. Pariksha offers a range of tests for the same; try to give one each day. In case of any issues with the site, try to change the passing year to 2018 or 2019.
5. **DI and LR** would be one of the **hardest** sections for you to solve within the stipulated time. Being proficient in QA will definitely help you in easing your way through the calculations. It can be mastered by practicing a set of definitive types of questions majorly asked in the paper linked in the resources section.
6. If your **English** is a bit weak, or you feel you are not confident enough to speak or understand it, start reading articles from reputed newspapers and magazines as well as begin talking with your friends and family in English. (Seems like a big ask for some, but will definitely help you overcome your fear in the interviews.). **Give as many mock interviews as you can (Focus on HR questions & Resume write ups for English practice).**
7. **Must know** technologies for a lot of companies are **SQL** and **Python**. And I would suggest you develop at least a basic understanding of them as well as the How, Where, When, and Why these technologies are a prerequisite for the analyst role.

8. The understanding of **Probability** and **Statistics** in conjunction with the above-said technologies forms the core of this profile. Expect questions from these topics and develop a fair understanding of them.
9. **Case Studies**, **Guesstimates**, **Puzzles**, and standard **HR** questions will form the basis of your interview preparation. Although, I would suggest you go through Puzzles and Case Studies beforehand as some companies will test you on that too.
10. Focus on your **strengths** while preparing your **resume**. It goes without saying that it will be the driving force of the interview and expect to be grilled to death about each and every word printed on that piece of paper.

Suggested Timeline

(Jan - Mar)

- **Be clear about the profile(s) for which you will be sitting in the placements ASAP.**
- If you aren't seriously preparing for CAT, do spend this time **analyzing your resume**.
- A decent resume would be a one with **at least**,
    - One intern (preferably in the field of analytics/machine learning and alike)
    - Two projects (preferably in the field of analytics/machine learning/business development/product role and alike)
    - 1 PoR (if you do not have enough interns/projects) clearly explaining your roles and responsibilities
    - Few extracurricular activities to strengthen your holistic development
    - You can find company-wise sample resumes here.
- **A Pure Software/Core Resume is usually a red signal for the interviewer. Try to avoid it.**
- If you **lack** on any of the fronts, this is the best time for you to **cover 'em up**. Your resume will be the first impression and can be a make and break situation, so give it due thought. You can look for sample projects in Python in this playlist.
- **Form a group** with people you trust to help you steer through the tough times ahead as well as help you in case studies, resume, and interview preparation, among many.
- Use this resource to get an idea of the kind of cases asked in various companies.
- Go **through the syllabus** carefully (from here) and **plan a timeline** that suits your situation. Although we will try to streamline a general timeline, feel free to tweak it accordingly.
- Read the **placement experiences** (from here) about the different analyst companies that visited the campus last year. You should be **well informed** about the profile and opportunities by the end of March. You can find the list of companies that visited in 2020 here.

- Choose a **language** (Python/R) based on the project you will be pursuing/have pursued.
- Learn the syntax of the language. You can refer to this, this and/or this as samples.
- Be comfortable with the basic implementation. **(Give time to this)**
- Be comfortable with **Python libraries** like NumPy, Matplotlib, Pandas, etc. And especially if you have used/will use them in your intern/project.
- Develop a basic understanding of **Microsoft Excel** from here or you can do a course of your choice. And if you have used it in your internship/project be clear about the workings of the formula and their use.
- If you have no understanding of what **Case Studies and Guesstimates** are, you can go through this, this, and this playlist.
- **If time permits**, you can also pursue this course to get a **look and feel** of the profile.
- Also, just to get an edge over others, **if time permits**, learn a visualization software, preferably **Tableau**.

(April - July)

- I hope you are well informed about the profile and the opportunities it offers. Also, you have a fair amount of an idea about the syllabus and your resume.
- The first step should be to develop a habit of studying for a couple of hours daily. **Consistency is the key.**
- I have laid down a step by step approach in the link here. Start at your own pace initially, as these months are just to develop your habit of **solving** questions **accurately**.
- **Do not rush** to Step 2 (DI and LR) until and unless you have solved all the questions in Step 1 (QA). Step 1 is the most crucial in terms of tests and in building your confidence.
- **Be clear** about each and every topic in QA and your doubts before moving to a new chapter or next step. Spend your time in Step 1 a bit. Get comfortable.
- Most of you will be having a 2-month internship from mid-May to mid-July. Try to squeeze in an hour or two to keep the rhythm of solving questions going.
- Do **not be hard on yourself** during your internship. Do it diligently and with focus. It will form the core of your resume as well as your industry experience.
- Be **thorough** with the **technologies** you will be using in your internship as well as about the project you are working on.
- **If the company and work is of your liking, try to grab a PPO and then help your friends in their process.**

(July - September)

- Try and **be regular** in solving aptitude problems. July marks the beginning of your serious preparation (if you weren't serious earlier, you should be now.)

- Try to **solve all questions** as well as **clarify your doubts** in all the 3 sections. You can find Step - 1 here, Step 2 - here, and Step 3 - here.
- **These months should focus on improving your accuracy as well as the ability to solve questions within a stipulated time. I would suggest you to time yourself when solving the material.**
- **You can either enroll for mock tests in an institute or give free mock tests like those of Prepleaf or Pariksha to test your preparation. An ideal time to start giving mock tests would be from the 1st week of September.**
- If you have exhausted the material mentioned in the above links. You can either practice from different sources cited in the resources section or start giving timed mock tests.
- **Study SQL** (you can refer to these notes as well as this course or this course) and practice questions from hackerrank (I would suggest **solving all the easy level** questions and a **few medium** level questions. You can leave the hard level questions entirely.)
- Join the Inter IIT Placement Group in Telegram (if and whenever it forms)
- Your placement tests will mostly start after your mid-semester examinations. Till then you should have figured out your strengths and must be working on improving your shortcomings.
- If you are running low on time, you should be **thorough with the QA part**. So that you can nail any chance that you get. **Consider it a pre-requisite for the analyst profile.**

(October - November)

- Try to give at least **one mock every two days** to keep in touch with the syllabus and to assess your preparation.
- Try to **cover all the topics** if you have kept some for the last. Attempt every mock test with the same frame of mind that you would be having during the placement tests.
- **Prepare Probability and Statistics well**. You can use this resource or check out this course on Khan Academy.
- October marks the beginning of your interview preparation. This is when your trusted group of friends become your most important asset and vice versa.
- You will simultaneously be having your placement tests so you would have to work on your shortcomings as well as prepare for your interview. Be prepared to study for long hours. Have a trusted group of friends around you to motivate and push you.
- **Interview preparation:**
    - Pick up cases from here and guesstimates from here or here and start giving mock interviews to your friends. For further practice, you can use this link.
    - Solve all the **85 puzzles** on GFG, starting from here. Be clear with the concept of these puzzles as the interviewer will focus on the way you solve them.

- Try to **solve** all the cases and guesstimates mentioned in the source given above. **Focus more on your approach**. **Keep it structured, concise, and to the point.**
- **Attend the PPTs of all the companies and make notes about some of your targeted companies.**
- **Go through the JD (Job Description) of every company you are sitting for an interview so as to know the kind of role it is and what kind of people they are looking for.**
- **Be the product they want to buy. Convince them that you are the perfect match.**
- **Resume Preparation**
    - Be honest on your resume.
    - Mention those technical skills which you are confident and comfortable with.
    - Be crisp and precise with your resume points.
    - 3 points are usually enough to summarise your internship/project. You can expand them according to your needs. I won't advise going beyond 4.
    - Be ready to answer questions like:
        - Why this project?
        - Walk me through your project/intern?
        - What did you learn?
        - What was your contribution?
        - How did you go about doing it?
        - What were the technologies involved?
        - What impact will it create in the real world?

        among many other similar questions.
    - Mention your projects and internships in a way that a person who is not familiar with the industry can understand. Avoid unnecessary jargon until and unless necessary. Be prepared with the in-depth grilling of them too.
    - **For projects and internships pertaining to Machine Learning, NLP or Deep Learning prepare each and every algorithm mentioned in the resume in depth. Learn about the mathematics behind them and prepare yourself to be intensively grilled in worst case scenarios.**
    - **Short Notes from Andrew Ng for ML - Link**
    - Clearly mention your roles and responsibilities in each and every project, internship, and PoR.
    - If you have mentioned your PoR, be ready to answer questions like:
        - Why is it important to this profile?
        - How can you justify mentioning it on your resume?

        - What impact has it had on your life?
        - What were your learnings?

          among many other similar questions.
      - Definitely mention extracurricular activities that align with the profile like HULT Prize, so as to steer the conversation towards it if necessary.
      - Companies are usually looking for honest, technically aligned, and well-formed individuals. If you can make them believe that you are the kind of people they are looking for then they will extend you the offer.
    - Communication skills are very very important. Do not take these lightly or for granted. The way you present yourself goes a long way in your selection in a company.
      - Try giving mock interviews to friends or seniors.
      - Prepare the standard HR questions well beforehand. You can refer to these for some samples. And go through this channel's guide to HR questions to understand what the interviewer is expecting from you.
      - Be confident, optimistic and have a smile on your face.
      - Use your company research here and while preparing you HR questions, quote a line or skills from their PPT or JD. It makes them happy.
      - **NEVER SAY NO** to the question - "Do you have any questions for us?". Be prepared with a question and if you can give it a personal touch then it can act like icing on the cake.
- Have faith in yourself. You are going to give your best. Be confident. Be motivated.
- Surround yourself with people that value you and will be there for you at all times.
- Give yourself time and everything will fall into place. **Just be consistent.**

Suggested Resources

1. Consolidated Drive Link for preparation.
2. Company wise previous year questions can be found here.
3. https://www.prepleaf.com/
4. https://www.pariksha.co/
5. https://online.2iim.com/CAT-question-paper/
6. https://examveda.com/
7. https://www.faceprep.in/quantitative-aptitude/#mock
8. ML Short Notes Andrew Ng
9. **Free** - Unacademy CAT Test Series

You can do the section-wise practice of questions as well as get a feel of the exam.

The more questions you solve, the more are your chances of cracking a good company.

We wish you all the best for your placements!
Document and Link Courtesy - Batch of 2021