

Insight 2010-11

The Placement Mantra

Companies

Company: Tata Motors

Profile Offered: Post Graduate Trainee

Open for Programme/Departments: AE (dual), ME, EE, MME (M. Tech)

Why this company? Best automobile company with best work culture.

Number of Students selected: 5

Process:

- (a) Tests : Aptitude Tests 30 minutes duration
Topics: Comprehensive reasoning, logical reasoning, quantitative, verbal ability+
Control systems, measurements & Instrumentation, simple physics, engineering
mechanics, strength of materials, thermal / design.

- (b) GD:
Preferred Topic: Social Networking is curse / blessing

- (c) Interview: 45 minutes duration
Improve on: Questions about significance of ground effect, aerodynamics of race
cars v/s normal cars, thermodynamics, heat transfer, about drag coefficient value
for cars, how to reduce pressure in car, wind tunnel testing for car model, use of
your thesis in industry practically, control system, op-amps, PE, polymers &
Composites, general questions about automobile parts, I.C. engine.

General Advice:

Study the aerodynamics of cars & trucks, thermodynamics, heat and conduction, must know about the company profile and past data of company, focus on control system, measurements & instrumentation, power electronics, advance drives, special m/c's, a person with a good CPI throughout he has a very bright chance of selection, well prepare for HR round

Company: LM Glassfiber

Profile Offered: Engineer

Open for Programme/Departments: All dual degree students

Why this company? Core Job with fair enough package

Number of Students selected: 1

Process:

- (a) Tests : Aptitude Tests 30 minutes duration
Topics: Reasoning and Technical (AE & ME).
- (b) GD: Not included
- (c) Interview: 45 minutes duration
Technical Questions related to course work

General Advice:

Prepare for courses offered by department

Company: ISRO

Profile Offered: Scientist/ Engineer SC

Open for Programme/Departments: AE, ME, EE (Dual and B. Tech)

Why this company?

Offer a core R&D profile, Intensive research based projects & practical applications in space, research field with practical application, most developed company in space research & rocket science

Number of Students selected: 7

Process:

(a) Tests: Not included

(b) GD: Not included

(c) Interview: 30 minutes duration
Improve on: Questions about fluid dynamics, wind tunnels, materials & their properties, solid mechanics, internship, modes of vibrations of beams, friction + lubrication, 4-R Linkages, Heat transfer, control systems, intern, MOS, design of machine elements, flight mechanics and structures, semiconductors & digital electronics, types of counters, to design a divide by 5 counters etc.

General Advice:

Good command over

- MOS & Fluid dynamics, Dynamics & Vibrations, Heat & Mass transfer, Theory of mechanisms, propulsion 1,2, Aero-D, flight mechanical. Structures 1,2, ME 359-IC engine
- ME-453-automation & control
- ME-341-Heat & Mass transfer
- ME-351-Theory of machines & mechanisms, Vibration & control, fluid dynamics & turbo machinery
- Don't try to answer those question which you are not sure of because panel members are very expert,

Company: NLC Nalco India Ltd

Profile Offered: Engineer/Chemist

Open for Programme/Departments: Dual Degree students (All departments)

Why this company? Provides research experience in industrial environment.

Number of Students selected: 1

Process:

- (a) Tests : Aptitude Tests 2.30 hours duration
 - Topics: a) Verbal ability
 - b) Data Interpretation
 - c) Analytical ability
 - d) Psychometric test.

- (b) GD: Not undertaken

- (c) Interview: 30 minutes duration
 - a) Power point presentation thesis/project
 - b) Internship
 - c) HR questions with SWOT

General Advice:

Know beforehand about research work of company. Well prepare for Aptitude test and HR questions

Company: Finisar Malaysia

Profile Offered: Design Engineers

Open for Programme/Departments: M. tech (LT)

Why this company? Specialization based on Laser & Optical fiber systems

Number of Students selected: 1

Process:

(a) Tests : Technical test

(b) GD: Not Applicable

(c) Interview: 30 minutes duration
Technical interview

General Advice:

Study Optical fiber communication introduction to lasers

Company: GE Global Research

Profile Offered: Edison Engineer

Open for Programme/Departments: M. Tech and Dual Degree (AE, EE, ME, CE)

Why this company? Aviation and programming, R & D profile, Opportunity to apply core Knowledge

Number of Students selected: 23

Process:

(a) Tests : Technical Test 20 minutes duration

Topics: a) Subjective

b) Fluid & Programming, speed of boat/stream type, problem on age, Mohr Circle, B.M. , deflection, shear stress in circular c/s, CAT type questions, where shear stress in maximum in the diagram?

In a sphere what is the ratio between volumetric strain and circumferential strain, torsion natural frequency of a system having a circular disc connected to a rod?

Given: Circle- radius, 2 chord lengths, fixed relation between distance from centre of chords if they are having a ratio of 1:2 lengthwise

c) Puzzles - A.P sum to n terms, GP next no. in series, A starts t1 B starts t2 at what time will they meet?

d) Geometry, probability, pipe and cisterns, turbines and compressors

(b) GD: Not Applicable

(a) Interview: 2 rounds of 30 minutes duration each

HR/Technical:

Improve on: What are the major projects you have done? On Thesis

Axial compressor functioning of GT engines, Principle stress and strain, natural frequency of beam problem, shear centre, finite element methods, fracture mechanics, composites, Strength of materials.

Algorithm to reduce size of stored matrix, predict next few numbers in series

Structure: Bending moment and load displacement relation

Aerodynamics: Derive expression of lift over air foil, write algorithm to store given data in different formats, basic fluid dynamics questions, turbulence, discretization schemes and error analysis on CFD.

Introduce yourself, tell something other than resume?

Family background, managerial skills, weakness, why not higher studies, why GE, tell some products in the market you would feel proud you were part of the team, 20 yrs down the lane, role model,

Why IITK are you capable of taking pressure in company? Give examples

General Advice:

Study: R.S. Agrawal of quantitative problems is a good solution. Fluid mechanics, Strength of materials, dynamics and vibration, FEM, Fracture and fatigue, composite materials, C++/C, DS, probability and stats. Heat and mass transfer, fluid dynamics and rate processes, CFD, turbulence. Thesis is the key factor, Structural analysis, dynamic and vibration. FEM propulsion

Company: TVS motors

Profile Offered: Member Research & Development

Open for Programme/Departments: M. Tech and Dual Degree (M.E.)

Why this company? Best automotive firm & a prestigious OEM, R&D profile, posting in Bangalore

Number of Students selected: 4

Process:

- (a) Tests : Aptitude Tests 30 minutes duration
Topics: Logical reasoning + General Awareness, Paragraph based Questions, aptitude

- (b) GD: 45 minutes duration
Preferred Topic: Design Analytics Vs Design Testing

- (c) Interview: Technical Interview 45 minutes duration
Improve on: Technical, practical design based & Thesis based questions, fire design, projects, paper published, basics mechanics and Dynamics, IC engine, Sonar & Radar, Law of Thermodynamics

General Advice:

Prepare theses well + basic engineering knowledge, Strong preparation of Thermo dynamic and Machine design, Optimization , Mechanics & Dynamics and IC engine, Heat transfer, solid mechanics

Company: IOCL R&D

Profile Offered: Scientist

Open for Programme/Departments: M. Tech (Chemical)

Why this company? Core Company

Number of Students selected: 1

Process:

(a) Tests: Not Applicable.

(b) GD: Not Applicable

(c) Interview: 30 minutes duration
Improve on: Questions about Pumps, 1GCC, Lube Oil, Heat Exchange

General Advice:

Deep knowledge of Petrochemical engineering

Company: IOCL

Profile Offered: Grade 'A' officer

Open for Programme/Departments: B. Tech (M.E. and E.E)

Why this company? Lots of Peak and a largest PSU, Stable job, decent salary package,
Cool job work.

Number of Students selected: 3

Process:

(a) Tests : Not Applicable

(b) GD: Not Applicable

(c) Interview: 25 minutes duration
Improve on: Thermodynamics, Energy systems & Turbo machineries, Questions
about pumps, IC engine, intern, protection of synchronous generator, ESO 210 &
drivers

General Advice:

Deep study of Thermodynamics, turbo machineries, fluid mechanics, detailed
study of Energy System, IC engine, heat & mass transfer, Thermodynamics, study of ESO
210 & Drives

Company: Zeus Numerix

Profile Offered: CAD/CAE/CFD Engineer

Open for Programme/Departments: M. Tech (A.E., M.E)

Why this company? Academic + Industrial experience. To get a practical experience in Handling CFD problems, Offer simulation in Aerospace.

Number of Students selected: 3

Process:

(a) Tests : Not Applicable

(b) GD: Not Applicable

(c) Interview: 30 minutes duration
Improve on: Question about CFD, Turbo machinery, Aerodynamics, propulsion, M. tech thesis, abacus, coding, previous work experience

General Advice:

Have a look on FEM, ANSYS, Programming C, C++, Good preparation of Finite Element Method (FEM) & Aerodynamics

Company: Ashok Leyland

Profile Offered: Deputy Manager

Open for Programme/Departments: M. Tech and Dual (AE ME, EE, MME)

Why this company? it is a manufacturing company of trucks, engines & similar products

Number of Students selected: 8

Process:

- (a) Tests : Aptitude Tests 1 hours 30 minutes duration
Topics: Basics, diagrams, analog,
Electrical engineering: Related to (a)Circuit theory b)Measurement c)machine
d)power electronics,
Graphic aptitude, find out the missing number in series, geometry, banking type
exam, 11&12th standard questions
- (b) GD: Not Applicable
- (c) Interview: 30 minutes duration
Improve on: Questions about FEM, Why Ashok Leyland and what will you do in
our company, basic electric drives like vector control of IM drives and HYBUS
of Ashok Leyland., thermodynamics, fluid mechanics, aerodynamics degree of
freedom, bending, coupling during flutter, engine based questions, CFD related to
SMAC and why we use staggered grid, nusselt number and prandtl number
passions, and being AE why one choose automobile industry etc.

General Advice:

Asking mainly design based questions & FEM, basic CFD, Prepare well
about company profile and good knowledge of advanced electric drives, power electronics,
Know projects very well in your CV and basic courses, score maximum in written, interview
not a big thing and less weight age, in aptitude test questions are simple and easy but time is
very short so here the speed matters.

Company: Hero Honda Motors Ltd

Profile Offered: Post Graduate Engineer Trainee

Open for Programme/Departments: M. Tech and Dual (M.E)

Why this company? To design a new fuel engine, leading two wheeler manufacturers in World

Number of Students selected: 3

Process:

(a) Tests : Not Applicable

(b) GD:

Preferred Topic: organize a cultural festival in your college,

(c) Interview:

40 minutes duration

Improve on: Questions related to IC engine and M. tech project, heat transfer, diesel engine. Why Hero Honda company?

General Advice:

if you are doing a project which is related to some company profile then better chances for selection, focus on your strengths and stick to them, divert them to your strong points,

Company: ACC Limited

Profile Offered: Management Trainees

Open for Programme/Departments: B. Tech (M.E. & Chemical)

Why this company? One of the best manufacturing companies of cement.

Number of Students selected: 3

Process:

- (a) Tests : Aptitude Tests 40 minutes duration
Topics: profit & loss, ratio, Percentage reasoning.
- (b) GD: Not Applicable
- (c) Interview: 25 minutes duration
Improve on: questions related to resume, intern, projects & manufacturing process of cement company.

General Advice:

Study thermodynamics, fluid dynamics, heat & mass balance.

Company: Tata Technologies

Profile Offered: Graduate Engineer Trainee & Post Graduate Trainee

Open for Programme/Departments: B. Tech and M. Tech (A.E. , M.E)

Why this company? If anybody want to explore CFD, & if passionate about design, Best core engineering design company.

Number of Students selected: 6

Process:

- (a) Tests : Aptitude Tests 30 minutes duration
Topics: Aptitude, Reasoning, English Questions

- (b) GD:
Preferred Topic: Future of electrical vehicle

- (c) Interview: 1 hour duration
Improve on: Question related to Fundamental concepts of fluid mechanics & aerodynamics, difference between helicopter & aero plane, spoilers, how temperature & pressure maintain inside an aero plane flying at 30000 ft? , thesis, CAD, FEM & manufacturing science, SOM, some design concepts, It would be better if u know Simulation Software.

General Advice:

Don't write anything in your resume which you don't know thoroughly because if u can't explain than there will be bad impression. Must focus on a)CAD, b)Optimization c)FEM d) Design, Show enthusiasm about company,& good technical question, don't lose temperament, try to show your thesis fruitful to them, apart from designing you must know other subjects as thermal or manufacturing subjects.

Company: Water Jet Germany Private Limited

Profile Offered: Engineer - Production/Electrical/Design

Open for Programme/Departments: MBA (IME)

Why this company? Best automobile company with best work culture.

Number of Students selected: 1

Process:

- | | |
|--|---------------------|
| (a) Tests : Aptitude Tests | 20 minutes duration |
| Topics: Technical & aptitude questions | |
| (b) GD: Not Applicable | |
| (c) Interview: | 30 minutes duration |
| Improve on: General HR questions. | |

General Advice:

Study the concept of marketing.

Company: Kirloskar Brothers Ltd

Profile Offered: Associate Manager

Open for Programme/Departments: ME (M. Tech)

Why this company? Company's area of working in Turbine, pumps, engines, CFD.

Number of Students selected: 2

Process:

(a) Tests : Not Applicable

(b) GD: Not Applicable

(c) Interview: 45 minutes duration
Improve on: questions about M. tech thesis, FEM, vibration, dynamics, composite materials. CFD

General Advice:

You should have good technical skills, confidence.

Company: Emmeskay Systems Solutions Pvt Ltd

Profile Offered: Engineer

Open for Programme/Departments: ME (M. Tech)

Why this company? Excellent job profile

Number of Students selected: 1

Process:

(a) Tests : Not Applicable

(b) GD: Not Applicable

(c) Interview: 45 minutes duration
Improve on: Questions related to mathematical basic questions.

General Advice:

General mathematical aptitude is very important.

Company: Airbus Engineering Centre India Private Limited

Profile Offered: Associate Engineer – Structures/Load

Open for Programme/Departments: AE and ME (M. Tech)

Why this company? Hard core linear & non linear FEA

Number of Students selected: 2

Process:

- (a) Tests : Aptitude Tests 1 hour duration
Topics: Aptitude and English questions. From RS Agrawal

- (b) GD:
Preferred Topic: Social Networking is curse / blessing

- (c) Interview: 30 minutes duration
Improve on: questions about SOM, Linear and Non Linear FEA, basic questions of Engineering, Mechanism, Strength of material, aerodynamics, ODE, PDE.

General Advice:

Must focus on SOM, Linear and Non Linear FEA.

Company: Eaton Technologies

Profile Offered: Engineer

Open for Programme/Departments: M. Tech and Dual (E.E., M.E. A.E.)

Why this company? Best Leading provider of electric component & systems for power quality, hydraulics, truck & automotive drives, does many aerospace related works, core company for design.

Number of Students selected: 7

Process:

(a) Tests: Not Applicable.

(b) GD: Not Applicable

(c) Interview: 40 minutes duration
Improve on: Questions about thesis & project work done in academic curriculum, about vibration, mechanics, FEM

General Advice:

Must read about FEM, Introduction to solid Mechanics. Technical round is difficult. Have a look on virtual instrumentation, flight mechanics. CPI matters.

Company: QUEST - Quality Engineering & Soft Tech Pvt Ltd

Profile Offered: Engineer

Open for Programme/Departments: M. Tech (M.E. and A.E)

Why this company? It provides work in the field design/analysis. It is a developing company

Number of Students selected: 5

Process:

- (a) Tests : Aptitude Tests 35 minutes duration
Topics: Reasoning, quantitative, aptitude, technical..
- (b) GD: Not Applicable
- (c) Interview: 45 minutes duration
Improve on: Questions about if you got GE offer before joining Quest what will u do? Basic engineering fundamentals, springs & vibrations. About Quest

General Advice:

They want to check how eagerly you want to join this company? Good communication skill & confidence, Good knowledge about FEA.

Company: Mahindra & Mahindra Ltd

Profile Offered: Graduate Engineering Trainee

Open for Programme/Departments: M. Tech and Dual (ME) & MME (B. Tech)

Why this company? passionate to the automobile field.

Number of Students selected: 5

Process:

- (a) Tests : Aptitude Tests 1 hour duration
Topics: Questions related to automobile industry & Farm & Agriculture.
Technical & aptitude questions

- (b) GD:
Preferred Topic: Experience in IITK

- (c) Interview: 20 minutes duration
Improve on: Questions about the role of flywheel in automobile field and all questions related to machines, internship & projects, revise the basics of mechanical metallurgy, IC engines , manufacturing,.

General Advice:

Just brush up your technical parts & interested subjects. Prepare well Theory of machines, fluid machines & fluid mechanics, mechanical metallurgy, manufacturing process, Iron & steel making, IC engine

Company: Reliance Industries Ltd

Profile Offered: Graduate Engineering Trainee (GET)

Open for Programme/Departments: B. Tech and Dual (ME, EE, CHE) & MME (B. Tech)

Why this company? career in an Oil industry, best platform in hardcore engineering. CTC of 6 lakhs.

Number of Students selected: 21

Process:

- (a) Tests : Aptitude Tests 30 minutes duration
Topics: Questions were based on quick calculations and the problems were related to numbers, percentages and ratios. Very basic aptitude questions and every JEE qualified can solve it. Questions on Time, Speed, Distance, Average, English. This test was organized to check the IQ level. In technical test the questions were difficult, technical from engineering concepts like pumps, distillation column etc. Heat & Mass transfer
- (b) GD:
- (c) Interview: 15 minutes duration
Improve on: Question about refining process, summer internship, simulation work & software used. About mechanical properties of materials and manufacturing process, separation process, process control & Dynamics, Chemical process industries, engine oil, separation process, fluid mass transfer, pumps, condenser, a bit of designing related. Refinery process, distillation column, Reboiler, condenser. IC engine & Fluid machinery, thermodynamics. Heat balance equation for heat exchanger, and some questions related to thesis. Henry law, bubble points, variation, difference between conduction & radiation, variation of pressure head with flow rate for centrifugal pump, difference between reciprocating & centrifugal pump. BTP & internship, Energy system.

General Advice:

If you have done internship in refinery then you should brush up the overall process involved. Try to present yourself as very much industry oriented. Present your relevant projects first and explain them in a very comprehensive manner. Show them you are very interested in the company and will not leave it in near future. Prepare the internship & B.T.P. well. Write only those things in your resume which you can explain. If you have written a course in your resume you should know what the topics in that were. Just go through NPTEL site. This is the best way to revise the basic concepts of course and for dual degree students thesis plays an important role in their interview. Prepare the core industrial points or terms. Be prepared with RIL area of work. Just know your strength, weakness, short term and long term career goals. To prepare for this company devote some time to study things in Wikipedia in detail like pumps, condenser, reboiler, reflux, distillation, extraction, thermodynamic, fouling. Prepare some questions like why are you joining in core company & why are you not going for M. tech. They look for committed people. Even if your CPI is low, it won't matter, be confident. Course of corrosion would have an advantage for MME dept.

Company: Ballarpur Industries Ltd

Profile Offered: Graduate Engineering Trainee (GET)

Open for Programme/Departments: ME (B. Tech)

Why this company? India's largest paper production company and part of Avantha Group

Number of Students selected: 1

Process:

- (a) Tests : Aptitude Tests 30 minutes duration
Topics: Simple CAT type questions.
- (b) GD: Not Applicable
- (c) Interview: 20 minutes duration
Improve on: Question related to BTP & internship, Fluid mechanics, Heat & mass transfer, energy system.

General Advice:

Prepare your resume well and know about your BTP & internship.

Company: Renishaw

Profile Offered: Graduate Software Engineer

Open for Programme/Departments: CHE (M. Tech)

Why this company? Company work on laser and software data manipulation.

Number of Students selected: 2

Process:

- (a) Tests : Aptitude Tests 30 minutes duration
Topics: Questions related to 3-D image from different perspective, questions on probability and geometry, C++ programming skills(basic concepts of inheritance and scope).
- (b) GD: Not Applicable
- (c) Interview: 30 minutes duration
Improve on: Questions related to Vector algebra, math of JEE, optimization of variable, Molecular simulation, numerical methods for engineers.

General Advice:

Sharp your mathematical skills.

Company: Cummins India Ltd

Profile Offered: Engineer Associate/ core engine designer, Post Graduate trainee, CFD, CI analyst, CAE analyst

Open for Programme/Departments: AE & ME (B. Tech & M. Tech)

Why this company? core company. Want to work on CFD. Good location: Pune
largest manufacturer of diesel engine. Very good work environment, interested in thermal science and engine design, structure.

Number of Students selected: 16

Process:

- (a) Tests : Aptitude Tests 1 hour duration
Topics: 10 questions related to Heat Transfer, comprehensive type, fluid flow, Gate type questions. Mechanics, manufacturing science, theory of machines, tolerance, gear ratio, orthographic-isometric projections, design of mechanical component, navier stokes theorem, heat conduction equation, nusselt's no, gas dynamics, CFD, MOS, FEM, DNS Structural analysis. Drawing conventions and dimensions. Steel and Al density ratio, compression Ratio of diesel engine, pressure measurement about failure theories, beams, machine design, metal working process.
- (b) GD: Not Applicable
- (c) Interview: HR/Technical 1 hour duration
Improve on: Where will you see yourself after 5 yr? Questions related to Family background? What values you consider as a person? Adaptability problem? Strengths and weaknesses. Why you want to join the company? who are its competitors? Do you depend on your own knowledge or copy somebody else? Would you prefer a male or female boss? Fluid flow and CFD, Strength of materials, vibrations, thesis. SI and CI engine, turbocharger. Friction, combustion, draw stress diagram. where is max stress, what are various heat treatments to lower stresses, probability of fracture in rod, which gas is most harmful of all emissions, elasticity, fracture and fatigue. Question like minimize the cost of the pen, what innovations can you do with it?

General Advice:

Improve on basic engineering fundamentals of relevant stream strength of materials for structural analysis. Focus on confidence and good communication. Machine design, mechanics of solids, theory of machines is relevant courses. Study CFD, heat and mass transfer, IC engine. TA201, TA101, ESO214, ME351. Company may be more interested in M. tech students. Company selects only those candidates whose thesis work is very much related to their present work in R&D, it also sees social behavior, neutrality. Don't panic, try to be cool. Answer on the basis of your basics..

Company: Morgan Stanley

Profile Offered: Straits, Quantitative Analyst

Open for Programme/Departments: EE, CS (Btech/Dual), M.Sc- MATH/PHY

Why this company? Awesome package, non-coding+ mathematical work. If you like algorithm+ linear algebra+ probability go for it.

Number of Students selected: 6

Process:

- (a) Tests : Aptitude Tests 2 hour duration
Topics: 8 questions: statistics: probability distributions and theorms of linear algebra, Algorithms: DP, Puzzle
- (b) GD: Not Applicable
- (c) Interview: HR/Technical 2 rounds- 30 minutes duration
Improve on: Why Morgan Stanley? What between Tower and Morgan Stanley?
Your questions: Strengths/weakness. What is the job profile offered ? Why not phd? Prove that for $N \geq a$, $N > N^{.5} + N^{(1/3)} + N^{(1/4)}$, Statistics, Algorithms. x , y are random variables with prob. dist. $ke^{(-kx)}$ and $ue^{(-ux)}$.what is the dist. for $\min(x,y)$. An organism dies out with prob. p and spawns into 2 with prob $(1-p)$. what is the prob. that starting from 1,the organism will die out? In a unit circle, p is chosen uniformly on the circle and q inside the circle, what is the prob. that the rectangle is inside the circle? Find a local minima of an array in $o(\log n)$? In a functional prog. Write a code to sort a list without pipes? Find an even length palindrome in a string in $o(n)$? A is a matrix v_i 's are n linear vectors s.t. $Av_i = V_j$ $a \leq j \leq n$, what are the possible values of $|A|$? A and B play a game with unfair count with $P[\text{Heads}] = p$. they count # of heads and tails .if # of heads $>$ #tails +1 at any point, A wins.Find the prob. that A wins? Given a sorted array find two element (i,j) s.t. $i+j = x$ in $O(n)$ time? question on bubble sort : Given random permutation, suppose i run bubble sort on it. What is the prob. that element at 20th position lands up at 31st position after the first iteration? A rod at length l , I randomly put 100 ants in the rod .each ant moves left and right in random direction with l m/s .what is the expected no. of collisions after 30 secs? in how many ways can i permute n numbers $1\ 2\ 3\ \dots\ n$ so that all the no.s between u and $i+1$ are less than i (for all i in the permutation)? Find $f(n)$: pdt $F(x)$ cdf. the value of $k > 0$ a constant $-\int S + \int f(x) * F(kx) dx$ x follows normal standard distribution? Number of inversions in an array in $O(n \log n)$ time? given a chessboard 8×8 I put numbers from 1 to 8 in it in such a way that no. x is the mean/average of its neighbor. What is the range of the numbers? Minimize the cost of the pen, what innovations can you do with it?

General Advice:

Improve on Linear Algebra, Probability, Algorithms..

Company: ANZ Bank

Profile Offered: Analyst

Open for Programme/Departments: M.Sc- MATH (5year and 2 year)

Why this company? Credit - risk management

Number of Students selected: 1

Process:

- (a) Tests : Aptitude Tests 1 hour duration
Topics: 25 MCQ, 1 case study: difficult than other companies' aptitude tests.
Focus more on the precision than score.
- (b) GD: Not Applicable
- (c) Interview: HR/Technical 45 minutes duration
Improve on: why ANZ, future plans, differentiate ANZ from others etc. stats and credit risk

General Advice:

Improve on Statistical courses; prepare for CAT; try best to get a company internship in pre-final year

Company: Schlumberger

Profile Offered: junior Field engineer

Open for Programme/Departments: All (B. Tech and Dual degree)

Why this company? technical field job, valuable training and work experience..

Number of Students selected: 3

Process:

- (a) Tests : Not Applicable
- (b) GD: 10 students - 20 mins.
Abstract topics: Economics,
Color of oil, nomad
Connect them (Frustration, silence, Fortune)
(India, I-me-myself, Pain, Full of life).
Don't panic, be objective and clear. Listen to others, disregard kindly.
- (c) Interview: HR/ Technical 45 minutes duration
Improve on: Basic questions on resume. Show you are interested in company.
What new innovations you made.
- (d) Group Activity: 20 students out of 40 were shortlisted. 4 panels of 5 each are made.
Each was given a set of tools (battery, resistance wire, bulb, etc). We had to make a torch in 30 minutes. Be involved with the team and bring innovation.

General Advice:

Questions are not from any specific course, only from whatever is there in resume. Be calm and composed and friendly to interviewer.

Company: Stryker

Profile Offered: Design / Software engineer

Open for Programme/Departments: All Departments (B. Tech & M. Tech)

Why this company? company works in biomaterials and healthcare. The simulations are awesome. Aim for it if you like Fluid mechanics and Solid Mechanics.

Number of Students selected: 1

Process:

- (a) Tests : Aptitude Tests 1 hour duration
Topics: 2 types: software/ mechanical -25 questions. C language, pointers, objects, linked lists, arrays
- (b) GD: Not Applicable
- (c) Interview: 30 minutes duration
Improve on: Questions related to Vector algebra, math of JEE, optimization of variable, Molecular simulation, numerical methods for engineers.

General Advice:

Sharp your mathematical skills.