

Timestamp	Name	Branch/Degree	GV Panel	Time Duration of	Questions Asked	Suggestions/Tips for Preparation
4/17/2016 17:56:47		Mech	Abhijit Guha, Madali Ramgopal, PPB, R. Bhattacharya, Kumar Ray(Absent), Mihir sarangi, jinu Paul	25 minutes	Guha- Viscosity, variation with temp, Difference between Navier-Stokes and Euler equations, Use of navier-stokes, R. Bhattacharya- Rigid body equations of motion, Inertia matrix (many cross questions) Madali R- How many subjects have you been studied in IIT ? (lol) J Paul- Use of flux in welding	Be calm, prepare subjects which your panel-profs have taught
4/17/2016 18:00:02		MECHANICAL BTECH	KUMAR RAY, RANJAN BHATTACHARYA, LAKKARAJU, RAMGOPAL, PP BANDHOPADHYAYA, A GUHA	20 minutes	if you stand at the top of a building, why do you feel more breeze than at the bottom of the building? I took a thermometer out to open field and measure the temperature to be 52 degrees, whereas Google says that it is actually 38 degrees, why this difference or is it simply the thermometers fault? two equal masses on each side of a weighing balance, one aerofoil shaped, wind is blown from front of the weighing scale, what will happen? Name five welding processes and 6 machining processes? Energy balance equations for some heat transfer problem? Equations for isolation of vehicle body from base excited vibration, what is amplitude modulation in vibrations, what is bode plot and why is it made/used?	Be cool, be confident. More cool than confident actually :) try n prepare the subjects taught by your panel members. Keep a subject strong in case they ask you what you like, or if you see that you aren't able to answer questions. Practical questions are asked. There is no way you can answer all questions, and they will laugh at you or mock at any mistake you make, don't get psyched by all that. Enjoy your GV.
4/17/2016 18:07:12		Mechanical (B.Tech.)	SK Dash (Chairman), SK Pal, SN Bhattacharya, AK Samantaray, S Deb, MC Ray (absent)	around 15 mins	SK Dash: What is your favorite subject? (My ans was Engineering Materials) Name one engineering material and one non-engineering material. What is an isotropic material? Point out some anisotropic materials on the chair you are sitting on. How will you input 3.2×10^{-5} into a computer? SK Pal: Draw the stress-strain curve for steel. Is the stress in the curve engineering stress or actual stress? What is a composite? Point out some composites around you. Samantaray: Why is there a kink in the stress-strain curve? S Deb: Can water be used for machining? Are alloys composites?	Don't spend too much time preparing for the GV. 1-2 days should be sufficient. Be prepared to be asked some really random questions and gleefully accept the random answers that they tell you. Prepare according to the strengths of the panel and 1 subject as your strength.

4/17/2016 18:23:04	BTech	AKC, R.Maiti, Suman Chak, K.Biswas, M.A.Sidpara, Sanjay Gupta	30 mins	<p>1) Are you nervous? :P A discussion erupted on that topic finally proving myself a little nervous. Was told, my panel was a very peaceful one and that I should enjoy</p> <p>2) Did you have your breakfast? Since I didn't, I was offered and forced to take it and also was given a lecture about the importance of breakfast by suman and AKC :D B </p> <p>Then was asked for my CGPA, I said 8.27 and they said that I should be able to answer all the questions since I had such a good CG. :P</p> <p>3) Favorite topic? I said DOME (Wicked smiles everywhere) :P</p> <p>R.Maiti:</p> <p>4) Some question on gears which I didn't even understand. I said I didn't study gears.</p> <p>5) Draw the Forces on a shaft with a pinion and a gear(the arrangement was shown by a fig)</p> <p>Suman Chak:</p> <p>Was asked for the topics I studied the night before GV, said "cycles"</p> <p>6) PV diagram of an otto cycle real and ideal case, what are the different strokes that take place?</p> <p>7) what is flywheel? what are its uses?</p> <p>8) Does a bike have a flywheel? If yes, where is it located?</p> <p>9) Is the power cycle a thermodynamic cycle?</p> <p>Sanjay Gupta:</p> <p>10) What are the different forces that can act on a shaft?</p> <p>11) How does shear stress occur in a shaft?</p>	<p>Be confident! I prepared many topics but all my answers were from the 4 years of knowledge I gained, not the 2-3 day prep I did. Prepare topics according to the panel. If you don't know something, say it. The panel was very peaceful, they offered me breakfast, then they asked me to take tea/coffee. I said I drink only milk. Don't know what happened to AKC, he started praising me that he never saw anybody like me. :D :P</p> <p>The whole time AKC only anchored, didn't ask a single technical question. The panel was so friendly and funny that I had a smile carved on my face for the whole 30 mins. :D</p> <p>Overall, it was a nice experience. Just be confident and apply commonsense. Rest, just enjoy the last few moments in KGP.</p>
--------------------	-------	---	---------	--	--

4/17/2016 18:33:14	Mech/b.tech	Ghosh moulick, kingshook, ak nath; ramanujam	40 min	<p>ghosh maulick</p> <p>1)questions about flow inside a pipe; applicability of bernauli's theorem inside developing region and fully developed region of pipe</p> <p>2)fourier's law of heat conduction; why there is minus sign in it and -k can be replaced with other constant</p> <p>kingshook</p> <p>3)different types of acceleration of particle moving radially outwards in a rotating disc ; was asked to derive them</p> <p>4)glauber's criterion , grashoff's criterion, grashoff's number</p> <p>5)degrees of freedom questions</p> <p>AK nath</p> <p>1)mig/tig welding</p> <p>2)why does welding droplets doesnt fall off when a welder welds bridges against gravity</p> <p>ramanujam</p> <p>He was absent :P</p>	Just brush up the basics of the courses of your respective panelist and you'll do fine. No heavy duty stuff , just sit back and enjoy
4/17/2016 18:34:09	MF(Dual)	Prof SK Das(Chairman), SN Bhattacharyya, MC Ray, SK Pal, AK Samantray, S Deb	15 min	<p>Why is the movie Jungle book is UA certified(they wanted to ask question regarding how the 3D view is generated on 2-D screen),How our eyes measure size, how distance is judged and few more followups. Why rickshaw driver has to put extra force to keep rickshaw stable(it tilts in one direction), Stress-Strain curve explanation, What is Principal Stress, How a coin is made?(forming)</p>	After first question they asked me my favourite subject, I told MOS(MC ray was not in panel), they asked few basic questions. SK Das and SN bhattacharyya was very helpful. Keep the discussion very interactive, if you do not know the answer, at-least give a start and ask for help.

4/17/2016 18:46:14	MF Dual	Prof .AK Nath, K. Bhattacharya, S. Ghosh Moulick, Partha Saha, Ramanujam(absent)	35-40 min	<p>Q 1. KB- Draw Stress strain curve for mild steel and chalk , When load removed in the the plastic zone then again applied from zero increased exponentially how will the curve look like?</p> <p>Q.2 Manufacturing process to drill 1000 holes in low cost, less time in cast iron</p> <p>Q.3 Why NTMP are called non - traditional?</p> <p>Q. 4 How to extrude dragon on Glass slab of thickenss 2cm?</p> <p>Q 5. Can Hard materials can be cut with Soft tools?</p> <p>Q.6 Describe the EDM process. Anode, Cathode - Material properties.</p> <p>Q.7 SGM - Laminar, Turbulent Flow</p> <p>Q.8 Energy equation for fluid</p> <p>Q.9 Diffuser and Nozzle</p> <p>Q.10 Describe Rimming Process. Have you studied about it?</p> <p>Q.11 Grain structure of Ferrite, Cementite, MArtensite?</p> <p>Q.12 How Martensite is produced?</p> <p>Q.14 Describe the Fe-C Diagram</p>	<p>Dont' need to mug up everything. Prepare 2-3 subjects. Just sit back and relax during GV. Take a long nap before GV Day, it will help you recall all the fundas taught in lectures. Be confident and have a smile on face.</p>
4/17/2016 18:46:50	Mech	AK Nath, P Saha, Ghosh Moulic, Kingshook bhattacharya, Ramanuja (Absent - yo)	10-15 min	<p>1) NTMP related questions like which procedure should be used to machine which substance?</p> <p>2) Rankine cycle.</p>	<p>Prepare according to panel and your strengths. Act a little tensed, they will let you off easy :P</p>
4/17/2016 19:51:10	Mechanical, Dual Degree	AR Mohanty, CS Kumar, SK Panda, Manab K Das, Lakkaraju	15mins	<p>Intoduction & Future plans and follow up questions on that; How to design a shaft;2D diagram of shaft; What is NOx emission in IC engine and how it is formed; How to reduce harmful emissions; Equivalence ratio and graph of NOx emission vs equivalence ratio; What is extrusion and forging? Forward and Backward Extrusion.</p>	<p>Do prepare DOME, ATF , Thermodynamics and CFW. And little bit about other subjects. Don't tell that you are going for non core job even if are, because they ask random questions. CSK didn't asked me single question , was just smiling all time. Don't get nervous.. be cool.. panel will laugh at your mistakes, give a smile ;)</p>

4/17/2016 21:37:36	Manufacturing B.Tech	Soumitra paul, kalelkar, subhranshu roy, rachrela, Anirban das gupta	15 minutes as i was 2nd last guy	<p>choose subject from every streams:applied mechanics:MOS, manufacturing:MTM, thermal:heat transfer.</p> <p>80% of the questions were from MTM luckily...P</p> <p>q1: describe every angles that are used in tool geometry?</p> <p>ans:refer abc's book.</p> <p>q2:is reference plane always horizontal??</p> <p>ans:no, it is always perpendicular to the cutting speed. so if cutting speed is anything but vertical, horizontal plane will shift accordingly.</p> <p>q3:tool life depends on which wear? flank or rake?</p> <p>ans:flank wear only as it will degrade the surface roughness.</p> <p>q4:draw masterline for a common tool?</p> <p>ans: refer to abc's book</p> <p>q5: suppose i need to take bath after 5 minutes(winter season), i am having a bucket of cold water and hot water.would you mix it up or not?</p> <p>ans: yes because then degree of natural convection will be less.</p> <p>q5.5: how many types of convections are there?</p> <p>ans:2. natural and forced</p> <p>q6: suppose u need to take bath(summer season) through shower, would u take it standing up or sitting down?</p> <p>ans:sitting down due to larger surface area and more natural convection.</p>	<p>overstudy is futile, dont give a question mark look and use common sense in every question, they will provide hints at every question.give a formal greetings to every one and enjoy the short journey. all the best</p>
4/18/2016 2:09:51	MF	C S Kumar, ARM, Panda, MKD, Lakkaraju	15 min	<p>What is your dream job, What are the big manufacturing companies in India, Basic structure of steel plant, What is the difference between punch and a blank, Harmonic and periodic waves, who is fourier</p>	Just Enjoy

4/18/2016 14:09:32	B.Tech.	Prof. S. Paul (Chairman) Prof. S. Roy (absent) Prof. A. Dasgupta (absent)	15-20 min	<p>S. Paul : Placed company and etc. One subject each from thermal, design and manu. I told Heat transfer, MTM , NTMP. I didn't have touch with design, but they said you're a mechanical engineer, so I told them mechanics and they began with that only.</p> <p>V. Racherla : What properties of an object (a pen) do you consider when you load it? How many properties are required? Me- Young's modulus, Yield strength, silence:P Prof hints Shear, Bulk Modulus and asks what else? Me- Length, Cross-section area, Moment of inertia etc. Prof- Poisson's ratio , Any two are required What property will you consider in case of vibrations in the beam? Me - Natural frequency Prof - It's not exactly a property. He hints by asking a simple system of oscillation and what does the natural frequency depend on? Ans - (spring-mass),Mass of system, What does it relate to this system?(Density)</p> <p>C. Kalelkar: What is difference between Cp and Cv for solids at high temperature? Plot cp-cv vs T? Racherla hints thermal exp. coefficient.</p> <p>A. Bhattacharya: A falling raindrop - why does it not go to very</p>	<p>Prepare basics of 3 subjects(current sem one is easier) to mention, prep wasn't of much use. Profs ask you to think physically, provide hints. In mine, Racherla did give many. This panel is relatively peaceful. Dress formal. You're gonna answer what you know, try to be calm. Thank god, its over :p</p>
4/18/2016 16:36:42	MECHANICAL B.Tech	PK. Das, ARC, B. Maiti, DKP, D.Srivastav	20 mins	<p>B. Maiti.. 1. difference between truss and frame. 2. poisson ratio, stress ,strain . and some basic follow up qusion</p> <p>PK Das 1. some easy questions from Bernoulli's principle its assumption etc. 2. pressure drop in a pipe flow for laminar and turbulent flow 3.state of a transparent paperweight ..which was kept on their tabel (ans: supercooled liquid and not solid) ARC... asked one practical question and was looking for a logical explanation like why cnc machining over conventional machining and was cross questioning for every reply. DKP and SRIVASTAVA didn't ask any question.</p>	<p>1. just revise whatever you have learnt in you 4 year of roller coaster journey. 2. Chill don't panic during viva, they speak really friendly and will try to throw enough hints if required. 3. almost all profs are quite funny in this panel all the best enjoy ,its fun</p>

4/18/2016 19:06:08	B.Tech	S roy, S Paul, Kelkar, Rachel	15 min	Si engine strokes with diagram, energy stored in which part of engine(flywheel); Flow in closed circular pipe: parameters, Reynolds no. and does its value changes for different fluids; bending moment diagram, keys	prepare 2-3 subjects thoroughly, this group asks favorite subjects
4/18/2016 21:58:30	B.tech , Manufacturing science and engineering	K.ray , J.paul, R bhattacharya , A. guha , P.P.B,	10 min :P	P.P.B = how to cut a six inch cube of metal into peace so that wasted material is not more than 1mm thick. why cant we use here laser cutting? some basic question about die sinking EDM. J.paul = He draw a symbol of weld and asked draw actual weld. It was bit complex.	You will asked question only related to manufacturing and design. Even panel asks you about fluid, you can say no to these questions. So prepare well about design and manufacturing. Even you are not prepared , don't worry much .
4/26/2016 11:13:26	Mechanical B. Tech.	D.K. Shrivastava, P.K. Das, A.R. Choudhary, B. Maiti, D.K. Pratihar	Around 35 minutes	[DKS] Name the different modes of heat transfer? Which mode is predominant for flow over a flat plate? [PKD] Relation between Navier-Stokes equation, Euler's equation, Bernoulli's equation? Difference between first law of thermodynamics and bernoulli's equation? What is flow separation? Laminar vs turbulent-for which case does the flow separate at a latter point? What is Knudsen number and its significance? Why do we get a situation of slip b.c. in microfluidics? [ARC] What is orthogonal cutting? How do we mathematically describe the relation between cutting speed and wear of a tool? [BM] How does an earthen pot produce cooling effect? What physical quantity in the domain of solid mechanics is analogous to vorticity? [DKP] No question.	Prepare according to your panel (although in some cases it doesn't even matter). It all depends on your panel. The above mentioned professors are very peace. The questions in the thermal section might seem tough, but that was because they knew I am going for higher studies. The other students in my group were asked simpler questions. Go through the basics of the topics which the professors teach. [Cannot say much about DKP since he did not ask anything]
4/29/2016 3:46:41	B.Tech	SK Dash, AK samantray, satinath(sleeping)	less than 10 minutes	They straight away started with the questionnaire. Use of AC, working of AC. If we attach an AC such that it is between two rooms, its cooling one room and giving out heat to the other room, will the rise in temp of second room equal to fall in temp of first room. Then they started on bearings, types, cross sectional diagram and components, where have you seen these type of bearing. Mostly practical questions.	It doesnt matter how much you study unless you study each and every topic thoroughly. They enjoy those 10 mins with us. Just go face it and enjoy with them.