Timestamp	Name	GV Panel	Time duration of GV	Questions asked	Suggestion/Tips for preparation
10/4/2018 18:59:46		4	15min	SI engine working (practical) , Problems in building Carnot engine, Why do we do stress analysis? Why do we do strain analysis? Tool geometry ASI notation, Tool material, Tool Wear prevention.	Please prepare something or the other!!
10/4/2018 19:03:45		DK Pratihar, SK Pal, Aditya Bandopadhyay, Manab Kumar Das, Mihir Sarangi	10 minutes	1. What is your favourite subject? -> Soft Computing 2. Why is it called "Soft" computing? 3. What are the different techniques learnt in soft computing? 4. What are the differences between Genetic Algo, fuzzy controllers and neural networks? 5. Why do we need hybrid controllers like fuzzy neural networks or neuro fuzzy systems? 6. Philosophically, fuzzy logic controllers and neural networks are similar. True or false? Explain. 7. Next favourite subject? -> CFW 8. What are the unconventional methods of forming? 9. What are differences between TIG and MIG? 10. What is the range of condenser pressure in Rankine cycle? 11. Draw PV and TS diagrams of Rankine cycle. 12. Why is the pressure of condenser lesser than 1 atm? 13. Given the displacement fields u,v,w; how to compute the stress tensor?	Keep calm
10/4/2018 19:17:45		4 (MCR, AKC, JC, DKS, AG, ARC)	20 mins	1) Formula for stress in simple torsion prismatic beam 2) Notation of stress in that co-ordinate system 3) What all shear stresses are zero in that system 4) Modes of heat transfer 5) On what parameters does conduction depend 6) How will you find the conductivity of a specimen 7) What is steel 8) What is ferrite 9) Which has more carbon content, cast iron or steel 10) What is more brittle, cast iron or steel 11) Why is cast iron more brittle 13) What kind of tool is used in milling 14) What did you do in first year milling 15) How does cutting velocity affect machining process 16) Bending moment and torque are same force systems - what is the difference 17) Which kind of beam will you use for supporting a roof, taller or wider	Either prepare everything very thoroughly or don't prep at all

10/4/2018 19:25:33		Anirvan Dasgupta, A K Nath, Sati Nath Bhattacharya, Ajay Sidpara, Gautum Chakraborthy, Rajaram Lakkaraju	20 min	1) How is a plastic bottle manufactured (AK Nath) 2) Why is the welding process used commoly by local welders (AK Nath) 3) What kind of power source is used in welding and why (Constant current or Constant voltage) (AK Nath) 4) Define reynolds number and explain how it appears in the navier stokes equation (R Lakkaraju, Ans- on non dimensionalizinf the navier stokes equation the reynolds number appers on the left hand side in the viscous term) 5) Why does a chalk break when we apply bending moment at both ends (Gautum Chakraborthy)	I was asked to name 1-2 subjects of my interest from each of the specialization (design, thermal and manufacturing). Since the panels are usually mixed, I would suggest to prepare basics of at least one subject from all the three specializations. I had prepared fluids, thermodynamics, MOS and welding.
10/4/2018 19:27:26		Ramgopal, Racherla, Sovan Lal, PPB	15-20 min	1. Ramgopal gave values for Q1, T1, Q2, T2 and W and asked whether this represents a heat pump or a heat engine. Then he asked me to check if this is feasible or not and why. Then he asked me whether this is reversible or not and why. 2. PPB then asked me to frame a question and answer it. He then asked me the difference between Arc welding and Brazing, followed by explaining what brazing is. He then asked me what Friction stir welding. 3. Ramgopal then asked me to estimate the amount of energy required to weld a metal, given all the properties and subsequent discussion on the same (Basically you assume symmetry and it reduces to a fine problem with heat input from one end, and the other end is at Tambient) 3. Racherla asked me to explain the difference between High cycle and Low cycle fatigue and the point after which it crosses into High cycle fatigue. He then asked me to explain there is a lot of scatter in fatigue experiments but almost consistent results for tensile testing. He then asked me when a spherical ball bearing is used and when deep-groove ball bearing, followed by the speciality of spherical ball bearing as compared to deep-groove ball bearing.	Knowing you panel before hand helps. Study the basic courses: Fluid mech, Heat transfer, DOME, MOS and CFW to be safe for the viva.
10/4/2018 19:28:06		goush molick, bmaiti, jeenu paul, CS Kumar,	15 min	1. isoenthalpic expension and iso entropic process with example 2. how to cut a small rectangular bock from larger one 3. why we use hollow pipe for support in fan	
10/4/2018 19:29:14		Jinu paul, B Maiti, CS kumar, Ghosh Moulic, K ray	15 mins	1. what are the laws you use in fluid mechanics? 2.write the equation for law of continuity. 3.What is flexural rigidity? 4.Should the fins be placed on air side or water side in a heat exchanger? 5.what is a serendipity element(FEM)? 6. What is the physical meaning of intrpolation functions?(FEM) 7. Tell me some forming operations? 8. What are the defects in Deep drawing of a cup and how will you tackle it? 9.In what region will the forming operaation done(plastic or elastic) 10. Draw the stress strain curve and denote the region in which forming operation is done?	Prepare atleast one subject from each stream thoroughly.

10/4/2018 19:30:48		AR Mohanty(Absent), M Ramgopal,V Racherla, Sovan Lal, Anandroop(Absent), PP Bandhopadhyay (not in panel initially)	20-25 min	PPB- Frame a question from manufacturing and answer Me- Draw merchant circle PPB- Are you confident ? Me- Yes PPB- tell me the forces acting on the cutting tool, force balancing the normal force. PPB- Normal force and friction force have a resultant force and there are two other forces which have same resultant, specify the forces. Some more random questions from MTM VR- Asked a question from heat transfer Me- Sir I haven't prepared heat transfer(PPB to VR-Leave it then) VR- What is Cavitation, Where did you study it? VR- How will you choose the material for an object?(Answered but he wasn't satisfied then he pull out the cap of water bottle) VR- Why is it made of plastic not steel ? Sovan- There is building of 10 storey. It is required to pump water from a resorvior (ground) to a tank(on the roof). What will be the head ? What type of motor will you choose and why ? Sovan gave me a problem to draw BMD of a beam (It was last question. There were some followup questions also)	Study MTM there will be atleast one professor from manufacturing who will ask questions from MTM. Stay calm. Try to answer questions, prof may help in getting final answer.
10/4/2018 19:33:32		Material Testing Lab - V Racherla, S Das, PPB, M Ramgopal	Last, hence around 10min	Model the tea cup handle - write equation, is it steady state, is it ode or pde, temperature profile etc; Bicycle spokes are very thin, how do they bear compression; Types of joining processes, among them what is brazing, what is soldering, benefits of soldering.Draw stress strain curve for mild steel and aluminium on the same graph	
10/4/2018 19:36:36		1	15	1. How does the new and old ball swing. Draw the velocity profile and explain using that. 2. A plate is heated at a point on its periphery. And a air jet is applied on it. Draw temperature profile. Show temperature gradient line also.(by the way temperature gradient is normal to isotherms, use this concept) 3. Draw velocity profile for hagen poiseulle flow for laminar and turbulent flow. In which case the shear stress will be higher. 4. Can you swim in swimming pool made of honey. What principle is used in swimming (explanation using Reynolds number) 5. In Brayton cycle, how is intercooling done to reduce the compressor work. Show using TS diagram. How it is used to reduce the compressor work?	I was last person in my panel. All the vivas were held for 15-20 minutes. They asked me what are my favourite subjects. I told fluid mechanics, heat transfer and thermodynamics. So, only thermal professors asked me all questions. First Aditya Bandopadhyay asked some practical and conceptual questions. And then Manab sir asked little bit theoretical questions. Panel was good.

10/4/2018 19:42:54		Prof. P Saha, Prof. Jeevanjyoti Chakraborty, Prof. A Guha(Chair), Prof. M C Roy(had left), Prof D K Srivastava, Prof A Chowdhury	20 min	I was the second last student and entered the viva room at 4:30, professors were already tired. Guha: Tell us about the subjects you like the most, we will ask questions only from that. Me: Vibrations, Machine Tools and Machining, IC Engines Guha asks Saha to go for manufacturing qns, he was busy with his phone and waved towards A Roy Chowdhury, keeping his phone aside he asked me about the ARS representation of cutting tool parameters. I took my time, told them that I don't know this, but I know ORS representations and that it is used widely. He didn't ask me to proceed, instead asked me about what is Auxiliary Orthogonal plane and asked to make its diagram, then asked about the taylor's formula regarding the life of tool, I told that, but couldn't convince him that I know something about the subject. Guha: Asked about fatigue. If he applies same load to same body with different 'rates' then what will be the picture? Asked about creep, about of S-N curves. JJC: Out of maximum shear stress theory and distortion yield theory, which is more conservative and why? Wasn't satisfied with the qualitative answer. He further delved into teaching me about 'distortion'. Asked me whether 1]when a 3 cm sided cube transformed into 2 cm cube and 2] when it is transformed into 3 cm cuboid, these are different? asked me about distortion energy. Could not answer anything, he asked me to leave it. Guha: Gave a simple problem about finding stress concentration. I proceeded, I was wrong and was told that this is the conceptual mistake students make. Asked me about future plans. Told me that the way I talk, I look like a business person. I ended it with a smile. :)	Don't postpone it to the last day. Prepare at least three subjects, one from each mf/design/thermal. Still they might not ask you related to that. As in my case, most of the qns were from DOME. Dress well, keep smiling, coz, how your viva ends matters a lot I guess! When they ask you application based questions, even if you don't know the answer, ask them if you may make a guess. If they point out any mistakes, accept and mention them instantly. Stay cool, they are not as bad as they are perceived!
10/4/2018 19:45:23		A Guha, MC Ray, JJ Chak, DKS, ARC	~15 min	what is a beam and design application (random ques), Types of Forming, one application of bernoulli eqn	Almost all questions were of random nature, none of which required any prep. (in my case).However, basic preparation is advisable
10/4/2018 19:46:19		ADG, AMS, RL, GC, SNB, AKN	35 mins	1)ADG: Breaks a chalk by applying torsion, why is it breaking at 45 degress? What happens if the chalk is ductile and explain the failure reason. In Tension test what is the shape of the failure surface, explain. 2) RL: Explain Boundary layer formation in flow over a flat plate. Derive the relation between boundary layer thickness and length of the plate. 3) AMS: What is upmilling and downmilling. What is the type of milling machine in that case. Draw a milling process with axis of the milling cutter in vertical direction.	Always prepare at least 3 subjects, each one from every specialization. The viva completely depends upon the panel. Study conceptually. No need to remember huge formulas. They'll see whether your problem solving approach and concept is correct or not.

10/4/2018 19:48:04		SNB, Lakkaraju, AK Nath, Goutam C, Sidpara, Anirvan Dasgupta(Absent)	20mins	1)Point where there is maximum stress in a cantilever beam with a transverse load?(ans. at the topmost fiber where the beam is fixed) 2)cont... Where do you get the maximum deflection in a cantilever beam and what is the value?(ans. PL^3/(3EI)) 3)How will you design a beam if you want it to be extremely flexible?(ans. low Y material and choose cross section such that I is minimum, eg. thin sheet of paper) 4)Different operations that you can do in a lathe? 5)Can you drill an off center hole using a lathe?(ans. Yes, using 4 jaw chuck) 6)What is Velocity potential and stream function and when can you define it? 7)Stream function in a radial coordinate system?	Prepare at least 1 subject from each specialization and hope for the best!
10/5/2018 10:29:31		M Ramgopal,V Racherla,Sovan Lal Das, PPB, AR Mohanty(Absent), Anandroop(Absent)	10-15 min	Ramg: convective heat transfer coefficient (h) depends on what ? Write down the equation of heat transfer at the boundary of fluid flowing on the flat surface. Why does h increases when velocity is increased explain it with this equation? Generally values of h. Racherla: no question Sovan Lal Das : Draws a shaft diagram, how will you design it? What type of bearing we use for axial and radial thrust ? PPB: Disassemble elements of ball bearing, how do you manufacture ball? How do you manufacture cage, name of the process? what property we look while selecting material for ball.	prepare atleast one sub from each specialization
10/5/2018 16:47:48		Sn bhattacharya, goutam chakraborty, sidpara, anirban dasgupta, lakkaraju	20 min	Sidpara- what is indexing? Explain differential indexing? Explain how will you machine a gear with 41 teeth and 39 teeth Goutam chakraborty- draw stress strain curve? Some questions on hysterisis ? And some more follow up questions on true stree and true strain Lakkaraju- derive a relation between vorticity and circulation? Anirban dasgupta - he asked some questions on hydrostatic and deviatoric part of stress tensor . Then goutam chakraborty started mixing solid mechanics and fluid mechanics and asked a follow up question under what loading cavitation will occur and some more follow up questions.	
10/5/2018 16:50:30		Moulic Ghosh, Kumar Ray, Jinu Paul, C S Kumar, B Maiti, A new Prof(Thermal)	20 min	Duhamel Integral & its use, Limitations of Lagrange's 2nd equation & Matrix Iteration method, Definition of dynamics, Instruments used for field balancing of rotors, Definition of a fluid, Mohr circle for a fluid, Flow control valve is used on which side of a pipe suction side or discharge side and why, Types of machining operations, Forces on a tool during turning operation, Tool shape in friction stir welding, Which side should fins be placed on tubes in a heat exchanger and why	Study all the basics and prepare 1-2 subjects very well from all 3 domains

10/5/2018 17:00:12		A Guha, ARC, P Saha, MC ray, Jeevan jyoti chakraborthy, Srivastava	20 min	Q1 (ARC): What is rake angle? benefits of positive and negative rake angles My ans: Answered as per the notes, still wasn't satisfied. Q2 (MC ray): A lot of micro conceptual questions related to hooke's law. My ans: Couldn't answer many of them as he was expecting answers analogous to big bang theory as a starting point of universe. Q3 (A. Guha): Bouncers. Don't even remember! Q4 (JJC): Torque, torsion and shear stress relation. My ans: No biggy, simple. Q5 (Srivastava): View factor, stefan boltzman law Q6 (P saha): Function of riser, percentage carbon in different types of Iron alloys, Stiffness values for various types of steel. Some more questions which I don't remember. I had reviewed questions from GV from previous years. Didn't help. Questions won't be repeated.	Personally, I tried preparing for basics covering all the subjects. But notes were helpful for some questions only. Panel asked quite micro questions that could be answered only if you remember their statements spoken in class (which many a times aren't represented in notes). Preparing for 5-6 days will be overkill. Better to stick with 2-3 days. I didn't expect that panel would ask me questions only from my fav subjects, but they did, and it took a troll on me. Coz questions were not the basic ones thereafter. I would advice to prepare 3rd, 4th year subjects only. And mostly application based subjects while also covering for the basic subjects. The panel will fail you only when you are not able to answer the simplest questions. They start with some toughness level, and decrease or increase the level depending on how you answer. If the starting 2-3 questions aren't answered well by you, they will start asking very basic questions. So don't worry about getting a F grade, just ensure that basic concepts are covered so that you will be able to pull of a non-F grade.

10/5/2018 17:05:13		KRay - CSK - BMaiti - JinuP - GMoulik - Some New Prof	10-15 min	Told topics prepped to be - MOS & Vibrations - KR: Diff between Vibrations & Oscillations - KR: Vibrations in the fan above - BM: What is flexural rigidity (CSK asked what is bending stiffness- I didn't know both were the same thing -_-) - BM: In what context have you heard Soderberg line - New Guy: How would you measure flow rate through pump if you do not have flow measuring devices (Told him take a bucket and set a timer & measure the water collected :P) - New Guy: How would you measure flow if you are given a pressure gauge - New Guy: Poiseuille's flow (Didn't know) - GM: What is the unit of friction factor, What is Moody's Chart, What are the ways to calculate ff (Knew absolutely nothing about friction factor -_-) - BM: What is two force member, what if i apply transverse force in the middle (Ans: It can't be considered as a two force member, it will be a beam) - JP: What is solid state welding (Told fusion welding, friction stir welding) - CSK/JP: What happens in fusion welding? How is the material welded? (Ans: because of high heat due to friction, material gets soft and atoms can diffuse from one piece to another.. CSK wasn't satisfied.. He wanted the technical term that is 'Plastic Flow' of metal occurs between the interface) - BM: Tell me the simplest form of continuity equation(Av=Const). Now, when you open a tap fully you get a full flow but when you open it only a little bit you get less flow rate (i.e. velocity is less when tap is partially open when cont. eqn. tells us it should be more) This would mean that above equation is not valid. Why is that? (Told him the water experiences high resistance because of abrupt change in area, BM said i am partially correct- I should have also said, the flow won't	Won't make any huge difference if you don't study; but if you do, Study only the "very basic" concepts of each subject, Properly study only two subjects of your choice. If you do more than this there is no guarantee of getting the output proportionate to your extra effort. Study 2-3 days max. As far as humiliation was concerned, my panel fucked everyone else but they spared me (Don't know why, although i did give some wrong answers). So, at the time of interview, be mentally prepared for humiliation and focus on questions & answers only. Profs like to have their fun. Don't take it personally while in the room.
10/5/2018 18:27:15		M. Ramgopal, V. Racherla, S. L. Das, PPB	20min	M.R+S.L.D : draw howrah bridge, type of support(why that support), force in its members; PPB: cutting force types, what is boring, drilling, how glass is made, can it be extruded;	read about some common or famous practical applications of basic concepts
10/5/2018 18:42:57		SNB, Goutham Chakraborty, AK Nath	20 minutes	AK Nath asked about spot and seam welding, EDM and ECM. Goutham Chakraborty asked about buckling of beams, principle stresses and principle axis. SNB asked me to write down the condition of incompressibility and the LHS of the Navier Stokes Equations in radial coordinates.	Find out who is in your panel from your MTP/BTP guide and prepare accordingly.

10/5/2018 18:53:05		Prof. Abhijit Guha, MC Ray, Jeevanjyoti, AKC, DK Shrivastav	15-20 min	What is the function of valves in pipelines and how it happens ? Write continuity equation and explain it. What are principal stresses. Derive the deflection of cantilever beam acted upon by a load at its tip using any method. What are the forces acting during deep drawing process and what happens to the material due to it ?	Only the basics were asked mostly, but derivation of cantilever deflection required practice. So basics are most important. Use of common sense is also very helpful.
10/5/2018 19:43:19		A.R.Chowdhury, A.Guha, Dhananjay, Jeevanjyoti, P.Saha, M.C.Roy(he'd left well before my turn came :P)	15-20 mins.	A| .Guha : Tell us the courses you prepared so that we can ask you on that. Me: MOS, Vibration, MTM, IC Engines etc. A.R.Chowdhury : What is auxiliary orthogonal cutting plane? If both the rake angles and both the clearance angles are known (in ASA system), is it possible to get 'Approach angle' and 'End cutting edge angle'? | P. Saha : How do you know if a job is machinable ? Hint: explain from the nature of chip formation. | A.Guha: Heat is added at constant volume and constant pressure in SI and CI engine respectively. Explain the difference physically. Hint: Follow each of the process. | Dhananjay: What is the function of throttle in SI Engine ? | Jeevanjyoti: Given a force acting in a bar, How would you approach to find horizontal and vertical deflection. Hint: I was told to use Castigliano's 2nd theorem.	1. Stay calm and composed, don't do hurry while answering. 2. Never give up in the first go while being asked from topics out of your comfort zone. Take your time, try your best to figure it out with whatever knowledge you have. Keep letting them know your approach. They would subtly guide you to pick the hint! ;) ;) 3. Don't hesitate to ask questions for clarification. They do appreciate students who ask something relevant to the question. 4. Be well-dressed, wear a natural smile even when things are going out of hand (:P), you may greet them while walking in and coming out. P.S. : I was the last student in our GV set. Moreover, the panelists had been tired of grilling by the time my turn came.I found the panel full of chilled vibes! So, if you are among the last few, don't miss the chance to capitalize the situation! Above all, it's a mere two credit stuff, not a purgatory! So chill and rock it bro! \m/

10/5/2018 21:38:58		Guha ,MC Ray ,Dhananjay ,Jeevanjyoti,AK Nath	15 minutes	1.Asked about favorite topics - since MC Ray was sitting, i was trying to avoid Solid Mechanics, hence IC engines. Kept on asking next next until i said a design subject. Subjects told were IC engines,heat transfer,CFW and vibration analysis in that order. 2. Guha acted as if he was incharge of the viva and rest of the profs were his phD students, so he began asking, " Draw the responses of an underdamped and overdamped system; "You see this fan here,why is it not hung from a string of adequate strength, and how is it hung at the first place." Correct answer is it is hung by a hollow rod, and it is so to counter torque. 3. In CFW, questions asked on what is forming,what kind of stresses (compressive/tensile) in it.Why does wrinkling happen? 4. In fluids,asked about point mass equation of continuity. 5.In IC engine, asked about the efficiency vs speed curve and volumetric efficiency vs speed curve.	Prepare some topics each from thermal,design and manufacturing.Be confident with your answers.
10/5/2018 23:19:40		Racherla, Sovan lal , Ramgopal	10-15 minutes	How will you select the material for a shaft with forces and moments acting on two discs at a distance 'L1' and 'L2' from the left end? What is the difference between biot number and nusselt number? What is the significance of nusselt number?	Prepare according to the panel and state the names of the subjects you have prepared clearly at the start of viva
10/6/2018 13:44:36		D.K Pratihar, S.K Pal, Mihir Sarangi, Manab Kumar Das, Adatiya Bandopadhyay	5 min	1. Fourier's heat conduction equation. 2. What is radiator? where have you seen? 3. How much moment required when we bend a beam into semicircle? (Use beam deflection formula). 4. How to cast a mould and related to sand casting and fluidity of materials for casting.	Preparing for GV is a best opportunity to understand our subjects practically and in depth, so prepare very well for atleast 4-5 days. Don't be panic if you don't get better grade in GV or better response from panel because it's mostly depends on our luck and panel's mood.
10/6/2018 18:09:04		Maddali RamGopal , Vikrant Racherla , Shovan Lal Das , PPB	20-25 min	MR : 1.(Coffee was served to the panel and a question was asked for the same)Write Heat equation for the coffee. 2. What happens to a room when we breather air. In other words does the humidity increases or decreases. 3. For a cyclic system write the first law of thermodynamics. 4. For a cyclic system write the second law of thermodynamics. SLD : 1. For a system consisting of a spring mass and a force on the system draw the FBD of the system as well as find out the equation and value of x for the system.	

10/7/2018 1:24:10		Vikranth Racherla, PPB, Sovan Lal Das, Ramgopal(Anandaroop, AR Mohanty - absent)	20 min	PPB - Ask yourself a question from manufacturing and answer the same(I had already told the prof that I had prepared concepts from heat transfer and strength of materials but he insisted me on answering this question) how's glass manufactured ? properties of a common refrigerator door, what can be the materials used in manufacturing the door ? can there be shear failure if only normal stress is applied and vice versa? (Prof. Vikranth helped me in deducing the answer to the above question) SLD - Mohr's circle related question (Prof. Ramgopal enters and the other profs suggested him to ask some questions) RamG - Estimate the energy consumed by a 1 ton AC density of air, water 1-D heat conduction equation units of heat transfer coefficient	Prepare a topic or two based on your VIVA panel(ask your btp/ mtp prof about the panel) and remember that any random question can be thrown at you
10/7/2018 1:36:50		S Ghosh Moulic, B Maiti, CS Kumar, Sourav Mitra, Kumar Ray, Jinu Paul	15-20 min	The professors were already in a hurry to go for lunch, so they kept my viva short and simple luckily. Jinu Paul: What's the importance of Oxygen-Acetylene proportion in Oxy- Acetylene Gas Welding ? Why only acetylene is used, why not any other hydrocarbon ? (Due to peak temperature reached with acetylene being the highest) B Maiti: Which one would you prefer between a rectangular cross section beam and an I-section for industrial purposes ? Sourav Mitra: Draw the thermal boundary layer on a hot wall and state the variation of heat transfer coefficient on the boundary. Ghosh Moulic: Use of condenser in a powerplant. CS Kumar: How is a paper cup manufactured ? (He made me draw the front, top and side views of the object and then asked to develop the surface of the frustum to get the answer.) Kumar Ray was quiet initially and then left midway for lunch.	Prepare according to your panel, though you should expect that the professors could ask you any random questions even out of their area of expertise.

10/7/2018 17:10:55		Mihir Sarangi, S K Pal, D K Pratihar, Manab Kumar Das, Aditya Bandhopadhyay	10 mins	1. DKP- Tell me 1st and 2nd favourite subject (CFW, Strength of material) 2. SKP- In rolling operation why sometimes it is needed to give backward motion to the sheet. (related to neutral axis & ...) 3. SKP- Draw Force vs displacement curve for Forward and backward extrusion 4. DKP- Difference between Orthogonal and oblique cutting. 5. MKD- You would have taken Fluid, Thermo and Heat transfer course, have you? (I told that I have just prepared Design and Manufacturing part. he then didn't ask me from thermal.... a big relief... But you people don't do like this.. it was just my luck...) 6. MS- Draw a stress-strain curve for mild steel? Machine name to get this curve? Draw a specimen diagram for tensile test and label it. Where does it fail? At what angle? How does it fail? The area under the curve? 7. Aditya Bandhopadhyay- no questions. It would be little peace if your turn comes nearer to the last one. I was the 10th student in my panel group.	1. Basics must be clear from all part thermal (Heat, Fluid), design (MOS) and manufacturing (MTM, CFW).
10/8/2018 17:24:47		MC ray, ARC, Dhananjay	35 min	Principal stresses definition Mtm tungsten carbide machining Diamond tool Problems in diamond tool Why damper modelled as cxdot Pressure in a tire Radiation form factor Concrete with three rods in bottom, top and middle in which case it will be used to take up load. Stephan constant value order. Radiation is weak due to that.	One day preparation is good prepare four subjects, with keeping specialization as priority.