

School of Aeronautics (Neemrana)

I-04, RIICO Industrial Area, Neemrana, Dist. Alwar, Rajasthan

Mr. Jaskaran Deep

B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
01	Thermodynamics	Abhinav Kumar (894)	Thermodynamics system <ul style="list-style-type: none">* Meaning of system* Types of systems* Basic concepts (Definitions understanding)* Control volume, states, cycle, process etc.	29-10-16
02	Thermodynamics	Abhinav Shukla (896)	1st law of Thermodynamics <ul style="list-style-type: none">* Heat & work concept* Law of conservation* Understanding of 1st law along with definition or equation	29-10-16
03	Thermodynamics	Jigyanshu Kumar (898)	2nd law of Thermodynamics <ul style="list-style-type: none">* Definition of Law and equations* Different statements (Kelvin-plank, clauses)* Relation with 1st law* Operation in daily life	29-10-16
04	Thermodynamics	Aman (900)	Heat Engine V/S Heat pump <ul style="list-style-type: none">* Definition along with block diagrams* Difference B/W the working principle of both* Example from day to day life	29-10-16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
05	Thermodynamics	Mayank Rajdan (901)	Law of perfect gas <ul style="list-style-type: none">* Law supporting a perfect Gas* Equations for perfect Gas* Difference b/w perfect Gas, Ideal Gas and other Gases* Ideal Gas equation of states	29-10-16
06	Thermodynamics	Sudhakar A. (891)	Pure substance & Equilibrium <ul style="list-style-type: none">* P-V, T-S Diagrams* What do you mean by pure substance & Equilibrium* How to attain Equilibrium* Vapur-liquid-solid phase equilibrium (Explain)	27-8-16
07	Thermodynamics	AKash malick (904)	Energy v/s Energy <ul style="list-style-type: none">* What do you mean by Energy and Energy* Difference between these two* Available and unavailable energy	27-8-16
08	Thermodynamics	Ritesh Kumar (913)	Mathematics relations of Thermodynamics <ul style="list-style-type: none">* Explain different type of relation- Maxwell Relation- Tds Relations- Chaperon Relation* Their importance and need in Thermodynamics	27-8-16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
09	Thermodynamics	Maqvi Mohd. (936)	Different types of flow <ul style="list-style-type: none">* Explain different types of flow, associated with thermodynamics* Their properties, difference b/w them (steady flow, non-steady flow)	27-8-16
10	Thermodynamics	Skyam Sundar (924)	Different types of cycle (part-1) <ul style="list-style-type: none">* Explain the different cycle with (p-v, t-s diagram)* Brayton cycle* Stirling cycle* Arccosine cycle	27-8-16
11	Thermodynamics	Fahim Ul Islam (954)	Different types of cycle (part-II) <ul style="list-style-type: none">* Explain different cycle with (p-v, t-s diagram)* Otto cycle* Diesel cycle* Atkinson cycle	10-9-16
12	Thermodynamics	PanKey Kumer (906)	IC Engine v/s EC Engine <ul style="list-style-type: none">* Definition of IC & EC Engine* Different between them* Uses* Properties	10-9-16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
13	Thermodynamics	Radhey shyam (907)	Two stroke v/s four stroke engine <ul style="list-style-type: none">* Meaning of two stroke & four stroke* Difference* Properties* Advantage & Disadvantages	10-9-16
14	Thermodynamics	mohit (908)	Patrol v/s Diesel Engine <ul style="list-style-type: none">* Meaning of Patrol & Diesel Engine (two & four stroke)* Working principle* Advantage & Disadvantage* Performance & capacity	10-9-16
15	Thermodynamics	surjit (909)	Refrigeration cycle <ul style="list-style-type: none">* Explanation or working principle* Explanation of figure, p-v, t-s, h-s graphs* Performance & capacity	10-9-16
16	Thermodynamics	Raktim (911)	Reheat cycle <ul style="list-style-type: none">* What do you mean by Reheat cycle* Working Principle* Figure, graphs,. Explanation* Advantages and Disadvantage over other cycles	10-9-16

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Mr. Pankaj

B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
01	Advanced Engineering Mathematics	Arkhil S. Pappu (864) Diwan Kumar (831)	Laplace Transform * Introduction * Definition * Linearity property * Laplace Transform of some elementary function * Transform of discontinuous function * First shifting property * Heaves ides's shifting theorem * Change of scale property	27-9-2016 06-8-2016
02	Advanced Engineering Mathematics	Yash Verma (833) Yogesh Damar (867)	Inverse Laplace transform * Definition * Linearity property * First shifting property * Second shifting property * Change of scale property * Use of partial fractions in L-T * Inverse Laplace transform of derivative - Multiplication by p - Division by p * Convolution theorem - Statement * Application of Laplace transformation to solve differential equations	06-8-2016 17-9-2016

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B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
03	Advanced Engineering Mathematics	Gurukirat Singh (870) Manish Kumar Rai (834)	Fourier series * Introduction * Periodic functions * Even and odd function * Euler's formulae - Directly's condition * Fourier series for discontinuous functions * Change of Interval * Half range series * Harmonic analysis - Introduction - Application of harmonic analysis	17-9-2016 06-8-2016
04	Advanced Engineering Mathematics	Samarth Tiwari (875) Shivam Bajpai (835)	Partial differential equation and its application * Introduction * Order and degree of differential equation * Solution of partial differential equation * Formation of partial differential equation * Application of partial differential equations - Introduction - Method of separation of variables.	24-9-2016 06-8-2016

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
05	Advanced Engineering Mathematics	Surinder Singh (876) Yash Mahinder (838)	Introduction of one dimensional wave and heat equation * Introduction * Solution of the wave equation * Apply initial and boundary conditions * Introduction one dimensional heat flow * Solution of the heat equation * Apply initial and boundary conditions	24-9-2016 06-8-2016
06	Advanced Engineering Mathematics	Kashish Madan (879) Ashu Dubey (847)	Introduction of Laplace equation * Introduction of Laplace equation - Potential theory - Harmonic functions * Definition of rectangular boundaries and circular boundaries * Solution of Laplace equation - Solution of Laplace's equation in Two-dimensional Cartesian form - Solution of Laplace's equation in polar coordinators * Application of Laplace equation in physics and engineering	24-9-2016 13-8-2016

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
07	Advanced Engineering Mathematics	Sanjay K. Singh (880) Aditya K. Pandey (848)	<p>Introduction of series solution and special functions</p> <ul style="list-style-type: none"> * Introduction * Definition - Power series - Analytic function - Ordinary point - Regular and Irregular singular points * Introduction of important differential equations - Bessel's differential equation - Solution of Bessel's equation - Series representation of Bessel functions - Recurrence relations for $J_n(x)$ - Generating functions for $J_n(x)$ - Integral form of Bessel's function * Equations reducible to Bessel's equation * Modified Bessel's equations * Orthogonality Bessel's functions 	<p>15-10-16</p> <p>13-8-16</p>
08	Advanced Engineering Mathematics	Shubham Mishra (881) Tarun (853)	<p>Introduction of Legendry's function</p> <ul style="list-style-type: none"> * Definition * Solution of Legeude's differential equation * Legendry's function of first kind * Generation function for $P_n(x)$ * Discussion of recurrence relations * Orthogonality of Legendry polymelias 	<p>15-10-16</p> <p>13-8-16</p>

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
09	Advanced Engineering Mathematics	Manoj Kumar (882) Preet Hitesh (854)	Introduction of Redirect's formula <ul style="list-style-type: none"> * Definition * Using Rodrigue's formula to get Legendre's polynomials * Orthogonality of Rodrigue's * Recurrence relations * Beltram's result 	15-10-16 13-8-16
10	Advanced Engineering Mathematics	Sadab Alam (856) Alka Y. (857)	Introduction of solution of Nonlinear equations <ul style="list-style-type: none"> * Introduction * Introduction Bisection Method * Method of false position * Convergence of regula-falsi method * Introduction of Newton-Raphson method * Convergence * Order of convergence * Geometrical interpretation 	13-8-16 22-10-16
11	Advanced Engineering Mathematics	Sonali (858) Gaurav Sharma (877)	Introduction of Numerical Analysis (Interpolation) <ul style="list-style-type: none"> * Introduction of Interpolation * Assumptions for Interpolation * Finite differences - Forward differences table - Backward differences table - Central differences table - Other differences table (a)- Shift Operator (b) Averaging Operator 	13-8-16 22-10-16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
12	Advanced Engineering Mathematics	Simran (866) Pranjal (939)	Introduction of Newton's formulae for Interpolation <ul style="list-style-type: none"> * Newton's Gregory forward Interpolation formula * Newton's Gregory backward Interpolation formula * Interpolation by unevenly spaced points - Lagrange's Interpolation formula - Newton's divided difference Interpolation formula. 	20-8-16 22-10-16
13	Advanced Engineering Mathematics	Purva (868) Pradeep K. (945)	Introduction of numerical solution of simultaneous algebraic equation. <ul style="list-style-type: none"> * Introduction * Types of method to solve such kind of equation - Direct methods--Triangularization method - Interactive methods--Causes-side iterative method. 	20-8-16 29-10-16
14	Advanced Engineering Mathematics	Shreyash (883) Aman (946)	Introduction to numerical differentiation and Integration . <ul style="list-style-type: none"> * Numerical differentiation - Newton's forward difference Interpolation formula. - Newton's backward difference Interpolation formula. 	20-8-16 29-10-16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
15	Advanced Engineering Mathematics	Ashish Kumar Das (885)	<ul style="list-style-type: none"> - Stirling central difference Interpolation formula * Numerical Integration - Newton's-cote's Quadrature formula - Trapezoidal rule (n=1) - Simpson's one-third rule (n=2) - Simpson's three-Eight rule (n=3) 	.
		Krishna Kant (952)	<p>Introduction to ordinary differential equations</p> <ul style="list-style-type: none"> * Introduction * Initial value and boundary value problems * Single step and multistep methods. * Numerical methods of solution of O.D.E. - Picard's method of successive approximations - Euler's method - Improved Euler's method - Modified Euler's method - Fourth-order Runge-Kutta method 	<p>20-8-2016</p> <p>29-10-16</p>

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Mr. Pawan Kumar Singh

B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
01	Object Oriented Prog. in C++	Nikhil Jasrota Abhishek M. (937)	Object oriented Languages * C++ * Small talk * Charm ++ * Java	10/9/16 15-10-16
02	Object Oriented Prog. in C++	Pankaj Kundwal Kranthi (938)	Usage of object oriented Programming * Office Automatic software * Artificial Intelligence & Experts system * CAD/CAM Software	10/9/16 15/10/2016
03	Object Oriented Prog. in C++	Lovely Sharma Mayur P. (940)	Components of objects oriented programming * Object * Class * Data abstraction & Encapsulation * Inheritance * Polymorphism * Dynamic Binding * Message Passing	10/9/16 15-10-2016
04	Object Oriented Prog. in C++	Punit (887)	Memory management operators * Malloc(), calloc(), Realloc() & free() * New & delete operators	22-10-16

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B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
05	Object Oriented Prog. in C++	Yash Dinesh (888)	Functions <ul style="list-style-type: none">* Inline function* Friends function	22-10-16
06	Object Oriented Prog. in C++	Priyam Mittal (889)	Overloading <ul style="list-style-type: none">* Operated overloading* Function overloading* Binary & binary operated	22-10-16
07	Object Oriented Prog. in C++	Anmol Ahlu- walia (902)	Construction & distructor <ul style="list-style-type: none">* Inline constructor* Parametensed constructed* Copy constructed	10-9-16
08	Object Oriented Prog. in C++	Sagar Chaudhary (903)	Type Corression <ul style="list-style-type: none">* Basic to class type* Class type to basic type* Class type to another class type	10-9-16

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B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
09	Object Oriented Prog. in C++	Jay shree K. (905)	Polymorphism * Runtime Polymorphism * Compile time Polymorphism	10-9-16
10	Object Oriented Prog. in C++	P. Sri (920)	Interistance * Private, protected & public * Classification of interistance	24-9-16
11	Object Oriented Prog. in C++	Karri Santosh (921)	Pointers * Basic class pointer * Base class objects * Desired classobjecte	24-9-16
12	Object Oriented Prog. in C++	Pontapali G. (922)	Application with files * File stream classes * Steps of file operators	24-9-16
13	Object Oriented Prog. in C++	Gideon John (927)	Template * Need of template * Class template * Function template	24-9-16

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B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
14	Object Oriented Prog. in C++	Anurag Kunder (928)	Exception handling <ul style="list-style-type: none">* Principle of exception handling* Keywords of Exception handling* Exception handling Mechanism	24-9-16
15	Object Oriented Prog. in C++	Ayushman (929)	Standard Template Library <ul style="list-style-type: none">* Iterator* Algorithm* Containers	24-9-16
16	Object Oriented Prog. in C++	Zafar Haider (951)	About ANSI & Turbo C++ <ul style="list-style-type: none">* Innovative data types* New type casting operators* Name space scope	24-9-16
17	Object Oriented Prog. in C++	Sandhya (933)	Data structure <ul style="list-style-type: none">* Stack* Queue* Linkid list	15-10-16

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B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
18	Object Oriented Prog. in C++	Karthik G.P. (935)	C++ & Memory <ul style="list-style-type: none">* Tiny* Small* Medium* Compact* Large* Huge	15-10-16

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Mr. Sumit Gupta

B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
01	Manufacturing Processes	K. Suhas (855)	Importance of Manufacturing <ul style="list-style-type: none"> * Economic definition of manufacturing * Technological definition of manufacturing * Survey of manufacturing process 	27-8-2016
02	Manufacturing Processes	Rohit K. Saini (859)	Foundry Technology <ul style="list-style-type: none"> * Pattern practices * Types of patterns * Allowances & materials * Moulding sand * Sand testing 	27-8-2016
03	Manufacturing Processes		Moulding practices <ul style="list-style-type: none"> * Green moulding * Dry and loam moulding * Pit and floor moulding * Permanent moulding * Carbon dioxide moulding 	
04	Manufacturing Processes		Casting practices <ul style="list-style-type: none"> * Fundamental of metal casting * Types of casting * Casting alloys * Casting defects * Design of casting 	

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
05	Manufacturing Processes		Metal joining process <ul style="list-style-type: none">* Introduction* Types of joints* Soldering* Brazing* Adhesive bonding	
06	Manufacturing Processes		Welding joint <ul style="list-style-type: none">* Principle of welding* Classification of welding* Types of welding<ul style="list-style-type: none">- Arc welding- Gas welding- Resistance welding	
07	Manufacturing Processes		Different welding process <ul style="list-style-type: none">* Atomic hydrazone* Ultrasonic* Plasma and laser* Electron beam* Explosive welding	

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B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
08	Manufacturing Processes		Forming processes <ul style="list-style-type: none">* Elastic & plastic deformation* Concept of strain hardening* Hot and cold working	
09	Manufacturing Processes		Shaping processes <ul style="list-style-type: none">* Rolling* Rolling principle* Extrusion* Wire and tube drawing	
10	Manufacturing Processes		Forging <ul style="list-style-type: none">* Method of forging* Forging hammers and presses* Principle of forging tools design* Forging operations	
11	Manufacturing Processes		Cold working processes <ul style="list-style-type: none">* Shearing, drawing* Squeezing, blanking* Piercing, deep drawing* Coining and embossing	

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
12	Manufacturing Processes		<p>Powder Metallurgy</p> <ul style="list-style-type: none">* Powder manufacturing* Mechanical pulverization* Properties of metal powders* Compacting of powders sintering* Advantages and application	
13	Manufacturing Processes		<p>Rapid prototype operations</p> <ul style="list-style-type: none">* Introduction* Subtractive processes* Additive processes* Virtual prototypes* Applications	
14	Manufacturing Processes		<p>Plastic Technology</p> <ul style="list-style-type: none">* Introduction* Classification of plastic* Ingredients of moulding compounds* General properties of plastics	

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B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
15	Manufacturing Processes		Plastic part manufacturing processes <ul style="list-style-type: none">* Compression moulding* Transfer moulding* Injection moulding* Extrusion moulding* Blow moulding etc.	

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Mr. S.K. Tripathi

B.Tech. Semester -3

S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
01	Mechanics of Solid	Paras Suresh bai Patel (830)	Simple Stress and Strain <ul style="list-style-type: none">* Types of stress and strain* Explain thermal stress* Shearing stress and strain* Linear Elasticity	6/8/16
02	Mechanics of Solid	Vinay Kumar (832)	Stress Strain Variation <ul style="list-style-type: none">* Hooks law for isotropic material* Yield points* Ultimate and breaking stress* Factor of safety* Poison ratio* Equation of equilibrium (static)	6/8/16
03	Mechanics of Solid	Vinay Kumar (836)	Free body diagram <ul style="list-style-type: none">* Calculation of stress in single solid bar* Calculation of stress in multi stepped bar* Free body diagram for composite bars.	6/8/16
04	Mechanics of Solid	Nitin (839)	Principle stress and strain <ul style="list-style-type: none">* Stress on undenied plane* Normal stress calculation* Principle plane angle calculation* Difference b/w principal and normal stress	13/8/16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
05	Mechanics of Solid	Akshay Anand (840)	Combined loading * Tension and compression stress calculation * Principle stress and strain * Stress and strain transfer nation concept equivalent bending and twisting motion	13/8/16
06	Mechanics of Solid	Pathan Fardun Khan Samiullah Khan (844)	Theory of failure * Principle stress theory * Shear stress theory * Shear strain theory * Von misses theory * Strain energy theory	13/8/16
07	Mechanics of Solid	Himanghu Pramod Kumar Gaur. (849)	Shear force and bending moment diagram * Types of beam * Types of lateral load * Types of support * Equilibrium condition * Relation b/w shear forces and bending moment	20/8/16
08	Mechanics of Solid	Vidhan Virek Kokane (850)	Static load diagram analysis * Cantilever with point local * Cantilever with uniformly distributed local * Simply supported beam with point load * Simply support beam with U.D.L	20/8/16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
09	Mechanics of Solid	Jai Jiva ganesh Bezawada (852)	Analysis of moving load diagram <ul style="list-style-type: none">* Members subjected to flexural load* Theory of simple bending* Moving load concentration* Load distribution pattern	20/8/16
10	Mechanics of Solid	Chetan Jaju (912)	Bending stress <ul style="list-style-type: none">* Equation of bending* Bending stress calculation for I section* Bending stress calculation for T section* Bending stress calculation for Z section	17-9-16
11	Mechanics of Solid	Chinmay Seth (914)	Shear stress <ul style="list-style-type: none">* Shear stress equation* Variation of shear stress* Shear stress analysis for I section* Shear stress analysis for T section	17-9-16
12	Mechanics of Solid	Prabudha Chakraborty (915)	Strain energy calculation <ul style="list-style-type: none">* Strain energy in bending* Strain energy in Torsion* Strain energy in shear* Strain energy in Torsion* Strain energy in Compression	17-9-16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
13	Mechanics of Solid	Priyanka T. (916)	Torsion in shaft <ul style="list-style-type: none">* Torsion equation* Variation torsion with twisting angle* Torsion in solid & hollow shaft* Power transmission equation	17-9-16
14	Mechanics of Solid	Sameer K. (918)	Column and struts <ul style="list-style-type: none">* Types of column* Fixities condition of column* Crippling and bucking load* Euler formulae* Equivalent length	17-9-16
15	Mechanics of Solid	Bodala Vishal (919)	Bucking stress calculation <ul style="list-style-type: none">* Bucking stress for both and pin condition* Bucking stress for one end pin other fixed* Bucking stress for both and fixed* Bucking stress for acentric loading (Rankine formula)	17-9-16

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
01	Material Science and Engineering		A atomic structure of Metals <ul style="list-style-type: none">* Crystal structure* Crystal lattice- BCC- FCC- HCP	
02	Material Science and Engineering		Crystallographic notations <ul style="list-style-type: none">* Miller indices- Atomic planes- Directions* Polymorphism and allotropy* Crystal imperfection	
03	Material Science and Engineering		Theories of plastic deformation <ul style="list-style-type: none">* Slip phenomenon* Twinning & dislocations* Identification of crystallographic possible slip planes* Direction in FCC, BCC, HCP	
04	Material Science and Engineering		Recovery and recrystallization <ul style="list-style-type: none">* Recovery* Recrystallization* Preferred orientation causes Effects on the property of metal	

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
05	Material Science and Engineering		Engineering Materials <ul style="list-style-type: none">* Classification* Solidification of metals* Solidification of some typical alloys	
06	Material Science and Engineering		Mechanism of crystallization <ul style="list-style-type: none">* Nuclear formation* Crystal growth	
07	Material Science and Engineering		Phase Transformation <ul style="list-style-type: none">* General principle of phase Transformation* Phase rule and equilibriums diagram* Equilibrium diagram of binary system* Binary isomorphous alloy system	
08	Material Science and Engineering		Equilibrium diagram <ul style="list-style-type: none">* Iron carbon* Phase Transformation* Transformation of austenite into pearlite* Martensite transformation in steel	

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
09	Material Science and Engineering		Heat treatment process <ul style="list-style-type: none">* Engineering properties and their measurements* Principle & application of- annealing, hardening, normalizing, tempering	
10	Material Science and Engineering		Hardenability <ul style="list-style-type: none">* Its measures* Variables* Effecting hardenability* Methods for determination of hardenability	
11	Material Science and Engineering		Basic principle involves in <ul style="list-style-type: none">* Heat treatment steel* Plain carbon steel* Cast irons* Non ferrous metals & alloys	
12	Material Science and Engineering		Chemical heat treatment of steels <ul style="list-style-type: none">* Physical carburizing* Nitriding* Cyanidin* Carbo nitriding	

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S.No	Subject	Name of Student	Seminar Topic	Date of Seminar
13	Material Science and Engineering		Effect produced by alloying elements <ul style="list-style-type: none">* Alloying elements* Silicon, Manganese* Nickel, chromium* Molybdenum, cobalt* Titanium & aluminium	
14	Material Science and Engineering		Steel <ul style="list-style-type: none">* Structure classes of steel* Classification of steel* BIS Standards	
15	Material Science and Engineering		Fibre reinforced plastic composites <ul style="list-style-type: none">* Various fibre and matrix materials* Basic composite manufacturing methods* Application of composite materials	