



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

## AERONAUTICAL ENGINEERING

### DEFINITIONS AND TERMINOLOGY

Course Name	:	AIRCRAFT MATERIALS AND PRODUCTION
Course Code	:	AAE005
Program	:	B. Tech
Semester	:	IV
Branch	:	Aeronautical Engineering
Section	:	A & B
Academic Year	:	2018– 2019
Course Faculty	:	Mr. T Mahesh Kumar, Assistant Professor. Mr. Suresh Kumar R, Assistant Professor

### OBJECTIVES

I	To help students to consider in depth the terminology and nomenclature used in the syllabus.
II	To focus on the meaning of new words / terminology/nomenclature

## DEFINITIONS AND TERMINOLOGY QUESTION BANK

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
<b>UNIT - I</b>					
1	Define ductility.	It is the property of a material that allows it to deform or make into thin wires under the action of tensile loads plastically.	Remember	CLO1	AAE005.01
2	What is plasticity?	It is the property of a material that makes it to be in the deformed size and shape even after the load stops acting on it.	Remember	CLO1	AAE005.01
3	Define elasticity.	It is the property of a material to come back to its original size and shape even after the load stops acting on it.	Remember	CLO1	AAE005.02
4	Define strength.	It is the capacity of the material to withstand the breaking, bowing, or deforming under the action of mechanical loads on it.	Remember	CLO1	AAE005.02
4	What is tensile strength?	It is the property of a material that allows it to deform under tensile loading without breaking under the action of a load.	Remember	CLO1	AAE005.02
5	What is malleability?	It is the ability of a material to form in to thin sheets without any rapture.	Understand	CLO1	AAE005.02
6	Define toughness.	It is the ability of a material to bent without any fractures	Understand	CLO1	AAE005.02
7	Define creep.	Under Gradual load conditions, the ability of a material to get deformed with respect to time and Temperature	Remember	CLO1	AAE005.02
8	Define brittleness.	It is that property by virtue of which a material breaks easily under action of shock loads without appreciable amount.	Remember	CLO1	AAE005.03
9	Define resilience.	It is the property of a material to absorb energy when it is deformed elastically and then, upon unloading, to have this energy recovered.	Remember	CLO1	AAE005.03
10	What is endurance limit?	The maximum stress to which the material can be subjected without fatigue failure	Understand	CLO1	AAE005.03
12	What is fatigue?	It is the strength of the materials when subjected to cyclic or rapid fluctuating load conditions.	Remember	CLO1	AAE005.03
13	Define rigidity.	It is the property of a material by virtue of which the material resists elastic or plastic deformation under applied loads.	Remember	CLO1	AAE005.03
14	What is alloy?	A substance having metallic properties and composed of two or more chemical elements of which at least one is metal.	Remember	CLO1	AAE005.04
15	What is Core?	The internal portion of a shape or part	Remember	CLO1	AAE005.04
16	Define Annealing.	Heating to and holding at a suitable temperature and then cooling at suitable	Understand	CLO1	AAE005.03

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
		rate, for such purposes as reducing hardness, improving machinability, facilitating cold working, producing a desired microstructure, or obtaining desired mechanical, physical, or other properties.			
17	What is Alloy Steel?	Steel to which alloying elements are added to achieve specific properties.	Understand	CLO1	AAE005.03
18	What is Austempering?	A heat treatment process that consists of quenching a ferrous alloy from a temperature above the critical range in a medium having a rate of heat abstraction (usually molten salt) sufficiently high to prevent the formation of high-temperature transformation products; and in maintaining the alloy, until transformation is complete, at a temperature below that of pearlite and above that of martensite formation.	Remember	CLO1	AAE005.03
19	Define Austenite.	A solid solution of one or more elements in face-centered cubic iron. Unless otherwise designated (such as nickel austenite), the solute is generally assumed to be carbon.	Remember	CLO1	AAE005.03
20	What is Austenitizing?	The process of forming austenite by heating ferrous alloy above the transformation range.	Remember	CLO1	AAE005.03
21	What is Bainite?	A constituent in the microstructure of steel; formed by the transformation of austenite below the pearlitic and above the martensitic transformation temperatures.	Understand	CLO1	AAE005.03
22	What is Cast Iron?	An alloy of iron and carbon above 1.7% carbon.	Understand	CLO1	AAE005.03
23	Define Grain.	A grain is a particle of metal or alloy in which the space lattice pattern is continuous except for small irregularities.	Remember	CLO1	AAE005.03
24	Define Ferrite.	A solid solution in which alpha iron is the solvent, and which is characterized by a body-centered cubic crystal structure.	Remember	CLO1	AAE005.03
25	Define Pearlite.	A lamellar aggregate of ferrite and cementite often occurring in steel and cast iron.	Remember	CLO1	AAE005.03
26	Define Tempering.	A process of reheating quenched steel to a temperature below the transformation range to achieve specific mechanical properties and hardness.	Understand	CLO1	AAE005.03
27	What is Pickle?	To clean metal surfaces by chemical or electrochemical means.	Understand	CLO1	AAE005.03
28	What is Quenching?	A process of rapid cooling from an elevated temperature.	Remember	CLO1	AAE005.03
29	What is Cast Iron?	An alloy of iron and carbon above 1.7% carbons.	Remember	CLO1	AAE005.03
<b>UNIT – II</b>					

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
1	What is Steel?	An alloy of iron and carbon which may contain other elements in which the carbon content does not exceed about 2.0% and which is malleable at some temperature in the solid state.	Remember	CLO1	AAE005.04
2	What is Core?	The internal portion of a shape or part	Remember	CLO1	AAE005.04
3	What is pattern?	An approximate duplicate of the final casting used to form the mold cavity.	Remember	CLO6	AAE005.06
4	Explain cope.	The top half of the pattern, flask, mold, or core.	Understand	CLO6	AAE005.06
5	Explain Drag.	The bottom half of the pattern, flask, mold, or core.	Remember	CLO6	AAE005.06
6	What is a sprue?	The pouring cup attaches to the sprue, which is the vertical part of the gating system. The other end of the sprue attaches to the runners.	Remember	CLO6	AAE005.06
7	What is Riser?	An extra void in the mold that fills with molten material to compensate for shrinkage during solidification.	Remember	CLO5	AAE005.05
8	What is shrinkage?	A casting defect is an undesired irregularity in a metal casting process. They are broken down into five main categories: gas porosity, shrinkage defects, mold material defects, pouring metal defects, and metallurgical defects.	Remember	CLO5	AAE005.05
9	What is a casting?	Casting is a manufacturing process in which a liquid material is usually poured into a mold, which contains a hollow cavity of the desired shape, and then allowed to solidify. The solidified part is also known as a casting, which is ejected or broken out of the mold to complete the process	Remember	CLO5	AAE005.05
10	What is Mold cavity?	The combined open area of the molding material and core, where the metal is poured to produce the casting.	Remember	CLO5	AAE005.05
11	Define Chaplet.	Long vertical holding rod for core that after casting it become the integral part of casting, provide the support to the core.	Understand	CLO5	AAE005.05
12	Explain about Solidification.	Solidification, also known as freezing, is a phase change of matter that results in the production of a solid. Generally, this occurs when the temperature of a liquid is lowered below its freezing point	Remember	CLO5	AAE005.05
13	What is Binder?	The bonding agent used as an additive to mold or core sand to improve the strength	Understand	CLO5	AAE005.05
14	Explain die casting process.	The die casting process forces molten metal under high pressure into mold cavities (which are machined into dies).	Understand	CLO6	AAE005.06
15	What is an Arc?	The physical gap between the end of the electrode and the base metal. The physical gap causes heat due to resistance of current flow and arc rays.	Remember	CLO6	AAE005.06
16	What is arc welding?	It is a type of welding that uses a welding power supply to create an electric arc between a metal stick ("electrode") and the base material to melt the	Understand	CLO6	AAE005.06

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
		metals at the point-of-contact. Arc welding processes may be manual, semi-automatic, or fully automated.			
17	What is Gas welding?	Gas welding is a process of construction that involves the use of gases as well as oxygen to weld metals together. Other names for gas welding are oxyacetylene welding and oxy welding. Developed in 1903, gas welding is used to weld pipes and tubes together while also being an effective way to repair metal.	Remember	CLO6	AAE005.06
18	What is arc cutting?	In an arc cutting, carbon or graphite electrode is used to melt the metal to achieve a cut on metals.	Remember	CLO6	AAE005.06
19	What is filled weld?	The position in which welding is performed on the upper side of an approximately horizontal plane and the face of the weld lies in an approximately vertical plane.	Remember	CLO6	AAE005.06
20	What is flux?	Material used to prevent, dissolve, or facilitate removal of oxides and other undesirable surface substances.	Understand	CLO6	AAE005.06
21	What is fusion?	The melting together of filler metal and base metal (substrate), or of base metal only, which results in coalescence.	Remember	CLO5	AAE005.05
22	What is torch?	A device used in the TIG (GTAW) process to control the position of the electrode, to transfer current to the arc and to direct the flow of the shielding gas.	Remember	CLO3	AAE005.03
23	Define welding rod.	A form of filler metal used for welding or brazing which does not conduct the electrical current.	Understand	CLO3	AAE005.03
24	What is porosity?	Cavity type discontinuities formed by gas entrapment during solidification	Remember	CLO3	AAE005.03
25	Define TIG Welding.	Gas tungsten arc welding in this welding process welds using the heat of a non-consumable tungsten electrode. Filler metal can be used and argon inert gas or inert gas mixtures are used for shielding.	Remember	CLO3	AAE005.03
26	What is MIG Welding?	Metal-Inert-Gas in this arc welding process uses a spooled, continuously fed filler metal (consumable) electrode. Shielding is provided by externally supplied gas or gas mixtures.	Understand	CLO3	AAE005.03
27	Define molten weld pool.	The liquid state of a weld prior to solidification as weld metal.	Understand	CLO4	AAE005.04
28	Define spot welding.	A weld made between or upon overlapping members in which coalescence may start and occur on the faying surfaces or may proceed from the surface of one member.	Remember	CLO3	AAE005.03
29	What is inert gas?	A gas which does not normally combine chemically with the base metal or filler metal. See also protective atmosphere.	Remember	CLO3	AAE005.03
30	What is soldering?	It is a process in which two or more items are joined together by melting and putting a filler metal ( <i>solder</i> ) into the joint, the filler metal having a lower melting point than the adjoining metal.	Understand	CLO3	AAE005.03

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
31	What is Brazing?	It is the use of a bronze or brass filler rod coated with flux to join steel workpieces. The equipment needed for braze welding is basically identical to the equipment used in brazing.	Remember	CLO3	AAE005.03
32	Define defects.	A welding defect is any flaw that compromises the usefulness of a weldment.	Remember	CLO3	AAE005.03
33	What is non-destructive testing of welds?	Welds may be tested using NDT techniques such as industrial radiography or industrial CT scanning using X-rays or gamma rays, ultrasonic testing, liquid penetrant testing, magnetic particle inspection	Understand	CLO3	AAE005.03
34	What is undercut?	When the base of metal melts away from the weld zone, then a groove is formed in the shape of a notch, then this type of defect is known as Undercut. It reduces the fatigue strength of the joint.	Understand	CLO3	AAE005.03
<b>UNIT – III</b>					
1	What is Blanking?	Shearing process using a die and punch where the exterior portion of the shearing operation is to be discarded.	Remember	CLO7	AAE005.07
2	Define piercing.	It is a process by which a hole is cut (or torn) in metal. It is different from punching in that piercing does not generate a slug. Instead, the metal is pushed back to form a jagged flange on the back side of the hole.	Understand	CLO7	AAE005.07
3	What is bending?	Bending is a manufacturing process that produces a V-shape, U-shape, or channel shape along a straight axis in ductile materials, most commonly sheet metal.	Remember	CLO7	AAE005.07
4	What is drawing process?	Drawing is a metal working process which uses tensile forces to stretch metal or glass. As the metal is drawn (pulled), it stretches thinner, into a desired shape and thickness.	Understand	CLO7	AAE005.07
5	What is coining process?	Coining is a closed die forging process, in which pressure is applied on the surface of the forging in order to obtain closer tolerances, smoother surfaces and eliminate draft. Closed die forging is a process in which forging is done by placing the work piece between two shaped dies.	Remember	CLO7	AAE005.07
6	What is hot spinning?	Hot spinning" involves spinning a piece of metal on a lathe while high heat from a torch is applied to the workpiece.	Remember	CLO7	AAE005.07
7	What is cold spinning?	Metal spinning, also known as spin forming or spinning or metal turning most commonly, is a metalworking process by which a disc or tube of metal is rotated at high speed and formed into an axially symmetric part. Spinning can be performed by hand or by a CNC lathe.	Remember	CLO7	AAE005.07
8	What is Shearing processes?	Processes which apply shearing forces to cut fracture or separate the material.	Remember	CLO7	AAE005.07
9	What is Forming processes?	Processes which cause the metal to undergo desired shape changes without failure or cracking. This includes bending and stretching.	Understand	CLO7	AAE005.07

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
10	What is Finishing processes?	processes which are used to improve the final surface characteristics	Understand	CLO7	AAE005.07
12	What is Perforating?	Process in which punching a number of holes in a sheet	Remember	CLO7	AAE005.07
13	What is Parting?	Process in which shearing the sheet into two or more pieces	Remember	CLO7	AAE005.07
14	What is Notching?	Process in which removing pieces from the edges	Remember	CLO8	AAE005.08
15	What is Lancing?	Process in which leaving a tab without removing any material	Understand	CLO8	AAE005.08
16	What is Punching?	Shearing process using a die and punch where the interior portion of the sheared sheet is to be discarded.	Remember	CLO8	AAE005.08
17	What is jig?	A production work holding device that locates the work piece and guides the cutting tool.	Remember	CLO3	AAE005.03
18	What is fixture?	A production work-holding device used for machining duplicate workplaces.	Understand	CLO3	AAE005.03
19	What is Assembling?	A process done by welding, binding with adhesives and bending in the form of a crimped seam	Remember	CLO3	AAE005.03
20	What is Die cutting?	A process that cuts metal pieces without the formation of chips	Remember	CLO3	AAE005.03
21	What is Stamping?	A high production process in which single or multiple punches, bends and embossing are performed at one time or in a progressive die	Understand	CLO3	AAE005.03
22	What is Ejecting devices?	Proper ejecting devices should be incorporated in the body to push the work piece out after operation	Understand	CLO4	AAE005.04
23	What is Back Pitch?	This is the shortest distance between two successive rows in a multiple riveted joint.	Remember	CLO3	AAE005.03
24	What is Jig body?	Holds the various parts of a jig assembly	Remember	CLO3	AAE005.03
25	What are dowel pins?	Hold fabricated parts together	Remember	CLO3	AAE005.03
26	What is Locating devices?	Pins, pads, and recesses used to locate the work piece on the jig.	Remember	CLO3	AAE005.03
27	What is Locking pins?	Inserted to lock or hold the work piece securely to the jig plate while subsequent holes are being drilled.	Understand	CLO3	AAE005.03
28	What is Diagonal pitch?	This is the distance between the centers of rivets in adjacent rows of zigzag riveted joint.	Remember	CLO3	AAE005.03

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
29	Define Rivet Codes.	The codes which are used to specify rivet material type, head type, diameter, and length and industry specifications.	Remember	CLO3	AAE005.03
30	Define Margin or marginal pitch.	This is the distance between the centres of the rivet hole to the nearest edge of the plate.	Understand	CLO3	AAE005.03
31	What is meant by rivet value?	The least of the strengths in shearing and bearing is the rivet value	Understand	CLO3	AAE005.03
32	What is Rivet?	A Rivet is a short cylindrical rod having a head and a tapered tail	Remember	CLO3	AAE005.03
33	What is Pitch?	This is the distance between two centers of the consecutive rivets in a single row.	Understand	CLO3	AAE005.03
<b>UNIT - IV</b>					
1	What is Headstock spindle?	Hollow cylindrical shaft supported by bearing	Remember	CLO11	AAE005.11
2	What is Saddle?	H-shaped casting mounted on top of lathe ways, provides means of mounting cross-slide	Remember	CLO11	AAE005.11
3	What is Cross-slide?	Provides manual or automatic cross movement for cutting tool	Remember	CLO11	AAE005.11
4	What is Apron?	Houses gears and mechanism required to move carriage or cross-slide automatically	Understand	CLO11	AAE005.11
5	What is Lathe Chuck?	A 3-jaw or 4-jaw chuck threads onto the spindle nose to hold your work	Remember	CLO11	AAE005.11
6	Define CNC.	Computer Numeric Control	Understand	CLO12	AAE005.12
7	Define HSS.	High Speed Steel	Understand	CLO12	AAE005.12
8	<i>What is Carriage?</i>	It used to move cutting tool along lathe bed	Remember	CLO12	AAE005.12
9	<i>What is Drilling?</i>	Drilling is the process of producing a hole	Remember	CLO12	AAE005.12
10	What is Reaming?	Enlarging an existing hole with a multi-edged tool (reamer) for dimensional accuracy and/or surface finish	Remember	CLO12	AAE005.12
11	<i>What is Counter sinking?</i>	Operation or producing a tapered feature at the end of a hole.	Understand	CLO12	AAE005.12
12	What is Counter boring?	Enlarging of an existing hole at one end. This enlarged hole is concentric with the existing hole and is flat at the bottom.	Remember	CLO12	AAE005.12



S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
13	What is Drill Shank?	It is the part of the drill by which it is held and driven.	Understand	CLO12	AAE005.12
14	What is Drill Point?	It is the sharpened end of the drill.	Understand	CLO12	AAE005.12
15	What is Drill Flutes?	The grooves in the body of the drill are known as flutes.	Understand	CLO12	AAE005.12
16	What is Knee?	The knee mounted in front of the column is for supporting the table and to provide an up or down motion along the Z axis.	Understand	CLO12	AAE005.12
17	What is Arbor?	The arbor is an extension of the spindle for mounting cutters. Usually, the thread end of an arbor is of left hand helix.	Understand	CLO12	AAE005.12
18	What is Milling Spindle?	The spindle holds the tool and provides the actual tool rotation.	Remember	CLO12	AAE005.12
19	What is cross feed?	The feed that operates across the axis of the work piece or at right angles to the main or principal feed on a machine.	Remember	CLO13	AAE005.13
20	What is cutting fluid?	A liquid used to cool and lubricate the cutting to improve the work surface finish.	Understand	CLO13	AAE005.13
21	What is drill chuck?	A device used to grip drills and attach them to a rotating spindle	Remember	CLO13	AAE005.13
22	What is face milling?	Milling a large flat surface with a milling cutter that operates in a plane that is at right angles to its axis	Remember	CLO13	AAE005.13
23	What is facing?	The process of making a flat or smooth surface (usually the end) on a piece of stock or material.	Understand	CLO13	AAE005.13
24	What is headstock?	The fixed or stationary end of a lathe or similar machine tool.	Understand	CLO14	AAE005.14
25	What is mandrel?	A precision-made tapered shaft to support work for machining between centers.	Remember	CLO13	AAE005.13
26	What is Shaper Ram?	That part of a shaper which moves back and forth and carries the tool head assembly.	Remember	CLO15	AAE005.15
27	What is tailstock?	That part of a machine tool. such as a lathe or cylindrical grinder which supports the end of a work piece with a center. It may be positioned at any point along the way of the bed, and may be offset from center to machine tapers.	Remember	CLO15	AAE005.15
28	What is plain cutter?	A milling cutter with cutting teeth on the periphery (circumference) only	Remember	CLO15	AAE005.15
29	What is knurling?	The process of finishing a part by scoring (pressing) patterns on the surface of the work.	Understand	CLO15	AAE005.15
30	What is feed?	The rate of travel of a cutting tool across or into the work-, expressed in inches per minute or in inches per revolution.	Remember	CLO15	AAE005.15

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
31	What is compound rest?	The part of a lathe set on the carriage that carries the tool post and holder. It is designed to swing in any direction and to provide feed for turning short angles or tapers.	Remember	CLO15	AAE005.15
32	What are abrasive wheels?	Wheels of a hard abrasive, such as Carborundum used for grinding.	Understand	CLO15	AAE005.15
<b>UNIT - V</b>					
1	Define ingot.	An ingot is a piece of relatively pure material, usually metal, that is cast into a shape suitable for further processing. Ingots usually require a second procedure of shaping, such as cold/hot working, cutting, or milling to produce a useful final product.	Understand	CLO16	AAE005.16
2	What is bloom?	In general, semi-finished rectangular or almost-square solid metal form, intermediate between an ingot and a billet in the hot-rolling process.	Remember	CLO16	AAE005.16
3	What is billet?	A billet is a length of metal that has a round or square cross-section, with an area less than 36 in <sup>2</sup> (230 cm <sup>2</sup> ).	Understand	CLO16	AAE005.16
4	Define slab.	A slab is a length of metal that is rectangular in cross-section.	Remember	CLO16	AAE005.16
5	What is plastic?	A plastic is a polymeric material that is in a semi-liquid state, having the property of plasticity and exhibiting flow.	Remember	CLO16	AAE005.16
6	Define thermoplastics.	Thermoplastics are plastic polymers that soften when they are heated, allowing for molding, and solidify again as they are cooled. ... Commodity thermoplastics are the easiest to process and are used to manufacture products in high volumes.	Understand	CLO13	AAE005.13
7	What is Catastrophic Failure?	This term is used to refer to a material breakdown that happens quickly and with little prior signs of failure. This is a term none of us ever want to experience but must be aware of the capability of any material to fail.	Understand	CLO14	AAE005.14
8	<b>Define Composite.</b>	Substance that is made up of a combination of two or more Different materials.	Remember	CLO13	AAE005.13
9	Define Compound.	A substance consisting of atoms or ions of two or more different elements in definite proportions, usually having properties unlike those of its constituent elements	Remember	CLO13	AAE005.13
10	Define Epoxy Resin.	Resins, which may be of widely different structures but are characterized by the presence of the epoxy group.	Remember	CLO13	AAE005.13
11	Define Fiber.	A threadlike structure that combines with others to form animal or vegetable tissue.	Remember	CLO13	AAE005.13
12	What is A Glass type?	The glass which is used when resistance to acids is required.	Understand	CLO13	AAE005.13
13	Define E glass.	Electrical Glass constitutes the majority of glass textile production.	Remember	CLO13	AAE005.13

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
14	Define Graphite.	Graphite Crystalline form of carbon used in pencils, as lubricant, and formed into manmade fibers etc.	Remember	CLO13	AAE005.13
15	What is HDPE?	high-density polyethylene	Remember	CLO13	AAE005.13
16	What is Kelvar?	Reinforced plastics, called composites, are plastics strengthened with fibers, strands, cloth, or other materials.	Understand	CLO13	AAE005.13
17	What is Laminating?	This term refers to the process of binding layers of materials together in a plastic matrix.	Understand	CLO13	AAE005.13
18	Define Latex.	This is a natural rubber extracted from rubber trees found Mainly in Southeast Asia.	Remember	CLO13	AAE005.13
19	What is LOCTITE?	Brand name cynacrolate / adhesive. Available in assorted strength and formulation.	Remember	CLO16	AAE005.16
20	Define Micro balloons.	Microscopic bubbles of glass, ceramic or Phenolic used as a filler or to create syntactic foam or putty mixtures.	Remember	CLO16	AAE005.16
21	Define Polymer.	A substance composed of molecules characterized by the repetition (neglecting ends, branch junctions, and other minor irregularities) of one or more types of monomeric units*	Remember	CLO16	AAE005.16
22	What is Polymerization?	The process in which many small molecules (molecular weight ~100) are joined together to form a few, much larger molecules (molecular weight 10 000 - 10 000 000).	Understand	CLO16	AAE005.16
23	What is Plastisizer?	A compound added to a polymer to make it softer and more flexible.	Remember	CLO16	AAE005.16
24	Define crystal.	A crystal may be defined as a solid composed atoms, ions or molecules arranged in a pattern periodic in three dimensions.	Remember	CLO16	AAE005.16
25	Thermoplastics.	Reference to the makeup of monomers that when formulated in a liquid state solidifies by cooling.	Understand	CLO15	AAE005.15
26	Define Young's Modulus.	The ratio of tensile stress to tensile strain below the proportional limit.	Understand	CLO16	AAE005.16
27	What is Resin?	While this term applies to a variety of materials it usually indicates a material that requires a catalyst, promoter and or temperature to allow it to cure.	Remember	CLO15	AAE005.15
28	What is Primer?	This term refers to a substance that is designed to improve adhesion to a materials surface.	Remember	CLO17	AAE005.17
29	What is Non Ferrous?	Metal which containing no iron.	Understand	CLO17	AAE005.17
30	Define Monomer.	A substance composed of molecules capable of reacting with like or unlike molecules to form polymers.	Remember	CLO17	AAE005.17

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
31	What is Ferrous?	Metal containing or derived from iron	Remember	CLO17	AAE005.17
32	What is Corrosion resistance?	The ability of a material to not be chemically degraded in its working environment.	Understand	CLO17	AAE005.17

Signature of the Faculty

Signature of the HOD

