



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

## AERONAUTICAL ENGINEERING

### DEFINITIONS AND TERMINOLOGY QUESTION BANK

Course Name	:	AVIATION MANAGEMENT
Course Code	:	AAE019
Program	:	B.Tech
Semester	:	VIII
Branch	:	Aeronautical Engineering
Section	:	A & B
Academic Year	:	2019– 2020
Course Faculty	:	Ms. K Sai Priyanka

#### 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	CO	CLO Code
<b>UNIT-I</b>						
1	What is a municipally operated airport?	municipally operated airport is city owned and run as a department of the city, with policy direction by the city council and, in some cases, by a separate airport commission or advisory board	Remember	CLO1	CO 1	AAE019.01
2	What are Port authorities?	Port authorities are legally chartered institutions with the status of public corporations that operate a variety of publicly owned facilities	Understand	CLO2	CO 1	AAE019.02
3	What do you understand from organization chart?	organization chart shows the formal authority relationships between superiors and subordinates at various levels, as well as the formal channels of communication within the organization	Remember	CLO1	CO 1	AAE019.01

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4	What is the responsibility of airport director?	The airport director is responsible for the overall day-to-day operation of the airport.	Remember	CLO1	CO 1	AAE019.01
5	Define airside.	The airside of an airport is planned and managed to accommodate the movement of aircraft around the airport as well as to and from the air	Remember	CLO1	CO 1	AAE019.01
6	Define airspace.	The airspace surrounding an airport is simply the area, off the ground, surrounding the airport, where aircraft maneuver, after takeoff, prior to landing, or even merely to pass through on the way to another airport.	Understand	CLO3	CO 1	AAE019.03
7	Define landside.	The landside components of an airport are planned and managed to accommodate the movement of ground-based vehicles, passengers, and cargo	Understand	CLO2	CO 1	AAE019.02
8	What is the purpose of airport terminal?	The airport terminal component is primarily designed to facilitate the movement of passengers and luggage from the landside to aircraft on the airside.	Understand	CLO2	CO 1	AAE019.02
9	What is the ground access?	The airport's ground access component accommodates the movement of ground-based vehicles to and from the surrounding metropolitan area, as well as between the various buildings found on the airport property.	Remember	CLO1	CO 1	AAE019.01
10	Define movement area.	The movement area is the part of the airfield that is under the direct authority of the air traffic control tower for the movement of aircraft and ground vehicles	Understand	CLO2	CO 1	AAE019.02
11	What are parallel primary runways?	Airports serving higher volumes of primarily larger aircraft tend to have additional runways in the form of parallel primary runways	Remember	CLO2	CO 1	AAE019.02
12	Define non precision instrument runway.	A non-precision instrument runway is one having an instrument approach procedure using air navigation facilities with only horizontal guidance or for which a straight-in non-precision instrument approach procedure has been approved by the FAA.	Understand	CLO3	CO 1	AAE019.03

S.No	QUESTION	ANSWER	Blooms Level	CLO	CO	CLO Code
13	What are runway centerlines?	Runway centerlines identify the center of the runway and provide alignment guidance during takeoff and landings	Remember	CLO3	CO 1	AAE019.03
14	What are Runway threshold markings?	Runway threshold markings help identify the beginning of the runway that is available for landing.	Remember	CLO3	CO 1	AAE019.03
15	What is blast pad?	The distance between the beginning of the runway pavement and the relocated threshold is marked by yellow-painted chevrons, which denote that the pavement is unusable for landing, takeoff, or taxiing of aircraft. This chevroned area is also known as a blast pad.	Remember	CLO3	CO 1	AAE019.03
16	Define displaced threshold.	A displaced threshold is threshold located at a point on the runway other than the designated beginning of the runway.	Understand	CLO4	CO 1	AAE019.04
17	What are runway aiming points?	Runway aiming points serve as visual aiming points for a landing aircraft.	Understand	CLO4	CO 1	AAE019.04
18	What are runway touchdown zone markings?	Runway touchdown zone markings identify the touchdown zone for landing operations. They are coded to provide distance information in 500-foot (ISO m) increments for a distance of 2,500 feet from the threshold.	Remember	CLO4	CO 1	AAE019.04

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<b>UNIT-II</b>						
1	What are Runway Safety Areas (RSA)?	Runway Safety Areas (RSA) are areas surrounding the runway defined by the FAA as the surface surrounding the runway suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.	Remember	CLO6	CO 2	AAE019.06
2	What is Engineered Material Arresting System?	EMAS is a soft, easily crushable concrete material that acts as an emergency braking agent for aircraft that overrun the runway on landing or aborted takeoff.	Remember	CLO6	CO 2	AAE019.06
3	Define horizontal surface.	The horizontal surface is a horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center	Remember	CLO6	CO 2	AAE019.06

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		of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.				
4	Define approach surface.	<b>The</b> approach surface is longitudinally centered on the extended runway centerline and extends outward and upward from each end of the primary surface	Understand	CLO8	CO 2	AAE019.08
5	Define transitional surface.	<i>Transitional surface</i> Transitional surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extends at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces.	Remember	CLO6	CO 2	AAE019.06
6	What is parallel taxiway?	A parallel taxiway is aligned parallel to an adjacent runway, whereas exit and entrance taxiways are typically oriented perpendicular to the runway, connecting the parallel taxiway with the runway	Understand	CLO8	CO 2	AAE019.08
7	What are Entrance, exit, and bypass taxiways?	Entrance, exit, and bypass taxiways connect the parallel taxiway with the runway. Entrance taxiways are located at the end of the runways, near the threshold	Remember	CLO6	CO 2	AAE019.06
8	What is taxiway centerline?	The taxiway centerline is a single continuous yellow line, 6 to 12 inches in width. This provides a visual cue to permit taxiing along a designated path	Remember	CLO6	CO 2	AAE019.06
9	What are Taxiway edge markings?	Taxiway edge markings are used to define the edge of the taxiway. They are primarily used when the taxiway edge does not correspond with the edge of the pavement.	Remember	CLO6	CO 2	AAE019.06
10	What are Continuous markings?	Continuous markings, consisting of a continuous double yellow line, with each line being at least 6 inches in width spaced 6 inches apart, are used to define the taxiway edge from the shoulder or some other abutting paved surface not intended for use by aircraft.	Remember	CLO6	CO 2	AAE019.06
11	What are Dashed markings?	Dashed markings are used when there is an operational need to define the edge of a taxiway on a	Remember	CLO6	CO 2	AAE019.06

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		paved surface where the adjoining pavement to the taxiway edge is intended for use by an aircraft,				
12	Define runway holding position markings.	Runway holding position markings defined as the boundary between entrance, exit, and bypass taxiways and the runway. Runway holding position markings consist of a set of four lines, two solid lines and two dashed lines.	Understand	CLO8	CO 2	AAE019.08
13	What are Enhanced taxiway centerline markings?	Enhanced taxiway centerline markings are found at the approaches from the parallel taxiways to the runway holding position markings, beginning 150 feet from the runway holding position markings	Understand	CLO8	CO 2	AAE019.08
14	What are Taxi shoulder markings?	Taxi shoulder markings are sometimes configured with paved shoulders. When such shoulders exist, they are marked with a series of yellow stripes leading from the solid yellow taxiway edge markings	Remember	CLO6	CO 2	AAE019.06
15	What is TSA?	Transportation security administration the is responsible for federal security screening operations for passenger air transportation and intelligence information related to transportation security;	Understand	CLO8	CO 2	AAE019.08
16	What does weather wire service do?	Weather wire service distributes several forms of weather data to the aviation community. The information includes hourly sequence reports, upper atmospheric wind and temperature data, foreign weather information, and reprints of weather satellite pictures.	Understand	CLO8	CO 2	AAE019.08

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<b>UNIT-III</b>						
1	What is General Aviation Manufacturers Association?	The General Aviation Manufacturers Association (GAMA) is an independent trade organization representing 52 U.S. companies that produce over 95 percent of the nation's general aviation aircraft and equipment.	Understand	CLO10	CO 3	AAE019.10



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2	What is ADMA??	The Aviation Distributors and Manufacturers Association (ADMA) represents distributors and manufacturers of aviation parts, supplies, and equipment in all manners of national importance	Understand	CLO10	CO 3	AAE019.10
3	What is NBAA??	The National Business Aircraft Association (NBAA) represents more than 4,000 businesses and corporations that generate more than one-third of the gross national product of the United States.	Understand	CLO10	CO 3	AAE019.10
4	What is AOPA??	The Aircraft Owners and Pilots Association (AOPA) represents more than 265,000 members who own or fly general aviation aircraft and fly for personal and business Purposes.	Understand	CLO10	CO 3	AAE019.10
5	What is ICAO?	The principal aim of the International Civil Aviation Organization (ICAO) is to develop the principles and techniques of international air navigation and to foster the planning and development of international air transportation	Understand	CLO10	CO 3	AAE019.10
6	Define personal flying.	All flying that is not common carrier for hire, business flying, or commercial flying, as defined to this point, is personal flying.	Remember	CLO11	CO 3	AAE019.11
7	What are private use airports?	Private-use airports are those that are not open to the general public but are restricted to use by their owners and the invited guests of the owners on an exclusive-use basis.	Remember	CLO11	CO 3	AAE019.11
8	What are publicly owned airports?	Public-Use Publicly Owned Airports All of these airports may be used by light general aviation aircraft. Fliers intending to use any airport can consult government or industry publications to ascertain its capacity and equipment.	Remember	CLO11	CO 3	AAE019.11
9	What is FSS?	Flight service station (FSS) network of 75 facilities for collecting and disseminating weather information, filing flight plans, and providing in-flight assistance and aviation advisory services	Remember	CLO11	CO 3	AAE019.11
10	What is the function of FSS?	The FSS system is vital to general aviation operations, and it is used by pilots at every level, from student pilots to air transport-rated pilots of large business jets.	Remember	CLO11	CO 3	AAE019.11
11	What are deferred taxes?	Deferred taxes refer to certain taxes that companies are required	Remember	CLO11	CO 3	AAE019.11

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		to collect for various taxing authorities, including federal excise and state sales taxes and payroll withholding of employee income taxes.				
12	What is Debt financing?	Debt financing refers to the borrowing of funds from commercial banks, insurance companies, and other sources.	Understand	CLO12	CO 3	AAE019.12
13	What is equity financing?	Equity financing refers to the sale of stocks, bonds, and other equity in the company to the public.	Understand	CLO12	CO 3	AAE019.12
14	What are operating leases?	Operating leases are short term (generally not more than five years) and have varying degrees of flexibility for cancellation by the airline.	Understand	CLO12	CO 3	AAE019.12
15	What is venture capital?	Venture capital is money invested in business enterprises that generally do not have access to the conventional sources of capital previously discussed	Understand	CLO12	CO 3	AAE019.12

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<b>UNIT-IV</b>						
1	What is ATA?	Air Transport Association of America (ATA) is the trade and service organization of the scheduled airlines of the United States	Remember	CLO13	CO 4	AAE019.13
2	What is RAA?	Regional Airline Association (RAA), is chartered to promote a healthy business climate for the growth of regional and commuter services by working with government, other organizations, and the public on issues affecting the industry.	Remember	CLO13	CO 4	AAE019.13
3	What is airline clearing house corporation?	Airline Clearing House is a corporation, wholly owned by the larger certificated airlines, through which the interline accounts of airlines, certificated and regional, are settled on a net basis each month.	Remember	CLO13	CO 4	AAE019.13
4	What is ATPCO?	Airline Tariff Publishing Company (ATPCO), wholly owned by 35 certificated air carriers, is employed by the airlines to publish and distribute fares and cargo rates to the travel industry	Remember	CLO13	CO 4	AAE019.13
5	What are regional airlines?	Regional airlines are airlines that operate regional aircraft to provide passenger air service to communities without sufficient	Remember	CLO13	CO 4	AAE019.13

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		demand to attract mainline service				
6	What are affiliated airlines?	As an affiliated airline, contracting with a major airline, operating under their brand name	Understand	CLO13	CO 4	AAE019.13
7	What is supplemental air transport?	Supplemental air transport, loosely defined as "charter trips to supplement scheduled service," granted carriers the rights to carry passengers and cargo on a non-scheduled, or chartered, basis	Remember	CLO13	CO 4	AAE019.13
8	What are runway side strips?	Runway side stripes delineate the edges of the runway. They provide a visual contrast between the runway and the abutting terrain or shoulders	Understand	CLO14	CO 4	AAE019.14
9	What is the purpose of runway side strips?	Runway shoulders provide for space between the runway itself and associated signage and lighting systems, as well as provide space between the pavement and non-treated ground to reduce the dispersion of rocks, dirt, and dust from jet blast, and accommodate the passage of maintenance and emergency vehicles near the runway environment.	Understand	CLO14	CO 4	AAE019.14
10	What is ARINC?	Air/ground domestic service is the original service provided by ARINC. Radio operators stationed in New York, Chicago, and San Francisco control a series of networks of radio stations.	Remember	CLO13	CO 4	AAE019.13
11	What is Point-to-point service is a system?	Point-to-point service is a system of low- and medium-speed dedicated and shared general-purpose communications channels	Remember	CLO13	CO 4	AAE019.13
12	What is PLIN?	PLIN (private-line intercity network) is an extensive network of communications links throughout the contiguous United States.	Understand	CLO14	CO 4	AAE019.14
13	What is AIA?	Aerospace Industries Association (AIA) is the national trade association that represents U.S. companies engaged in research, development, and manufacture of such aerospace systems as aircraft missiles, spacecraft, and space-launch vehicles; propulsion, guidance, and control systems for the flight vehicles	Remember	CLO13	CO 4	AAE019.13
14	What is a Deadstick?	A term for a forced landing, which takes place when the plane loses all propulsive power because the engine and propeller have stopped.	Remember	CLO13	CO 4	AAE019.13
15	Define Distress.	A condition on the aircraft that signals danger and requires	Understand	CLO14	CO 4	AAE019.14



S.No	QUESTION	ANSWER	Blooms Level	CLO	CO	CLO Code
		immediate action				

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<b>UNIT-V</b>						
1	What is a Controlled airspace?	A defined area of the sky that is controlled by ATC services. Controllers direct planes through the airspace, plotting the safest and most efficient route for each aircraft. All airplanes flying in controlled airspace must get clearance to enter the zone and be equipped to national regulations. The pilot must have the correct qualifications.	Remember	CLO16	CO 5	AAE019.16
2	Define Absolute altitude.	The vertical distance of the aircraft above the ground.	Remember	CLO16	CO 5	AAE019.16
3	Define Adverse yaw.	When the nose of an aircraft turns away from the direction of turn	Remember	CLO16	CO 5	AAE019.16
4	What is Aeronautical Information Manual (AIM)?	A publication by the Federal Aviation Administration (FAA) that instructs pilots how to operate correctly in the US National Airspace System. There are separate guides for the USA and Canada. The AIM is the official guide to flight information, Air Traffic Control (ATC) procedures and aviation safety.	Understand	CLO17	CO 5	AAE019.17
5	What is CAVU?	Stands for Ceiling and Visibility Unlimited, which indicates the ideal flying conditions, with a visibility of at least 10 miles and a ceiling of at least 10,000 feet.	Understand	CLO17	CO 5	AAE019.17
6	What is Emergency overrun?	A surface before the take-off area on the runway that is kept clear. This portion is designed to minimize damage to an aircraft if it is unable to stop.	Understand	CLO17	CO 5	AAE019.17
7	What is a Flight deck?	Another name for the cockpit, which is located at the front of the aircraft and holds the pilot and instrument panels.	Remember	CLO16	CO 5	AAE019.16
8	What are Instrument Flight Rules?	The rules that govern flying under instrument meteorological conditions. Pilots follow these rules and create IFR flight plans for various weather conditions.	Understand	CLO17	CO 5	AAE019.17
9	What is Instrument landing system (ILS)?	A radar-based system which allows ILS-equipped aircraft to find a runway and land safely, even when clouds are as low as 200 feet.	Understand	CLO17	CO 5	AAE019.17

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10	What is a Magnetic compass?	A liquid-type compass and essential navigation instrument that displays an aircraft's orientation in relation to the magnetic poles	Remember	CLO16	CO 5	AAE019.16
11	Define Mean sea level (MSL).	The average height of the surface of the sea. MSL is used in aviation to measure altitude.	Understand	CLO17	CO 5	AAE019.17
12	What are Operating limitations?	Indicates limits for a specific aircraft's speed, weight, pressure, and passenger and crew size. The limits are determined by the aircraft manufacturer.	Understand	CLO17	CO 5	AAE019.17
13	What is a Primary flight display?	Also called "PDF", this is the electronic display screen that indicates the horizon, altitude, airspeed, vertical speed, rate of turn, trend and more.	Understand	CLO17	CO 5	AAE019.17
14	What is Radar Approach Control Facility (RAPCON)?	A facility based in an airport terminal that uses both non-radar and radar to provide services for planes that are moving through a controlled airspace, landing, or taking off. RAPCONs commonly operate near civil and military airports and may be controlled by the FAA, military or both.	Remember	CLO16	CO 5	AAE019.16
15	Define True airspeed.	Also called "TAS"; the speed of an aircraft as it moves through the air. The number is corrected to account for temperature and altitude.	Remember	CLO16	CO 5	AAE019.16

Signature of the Faculty Signature

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