



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

AERONAUTICAL ENGINEERING

ASSIGNMENT QUESTIONS

Course Name	: AIRPORT PLANNING AND OPERATIONS
Course Code	: R15-A82129
Class	: IV B. Tech II Semester
Branch	: AERONAUTICAL ENGINEERING
Year	: 2018 – 2019
Course Coordinator	: Ms. Y. Swetha , Assistant Professor, Dept of AE
Course Faculty	: Ms. Y. Swetha , Assistant Professor, Dept of AE

OBJECTIVES

To meet the challenge of ensuring excellence in engineering education, the issue of quality needs to be addressed, debated and taken forward in a systematic manner. Accreditation is the principal means of quality assurance in higher education. The major emphasis of accreditation process is to measure the outcomes of the program that is being accredited.

In line with this, Faculty of Institute of Aeronautical Engineering, Hyderabad has taken a lead in incorporating philosophy of outcome based education in the process of problem solving and career development. So, all students of the institute should understand the depth and approach of course to be taught through this question bank, which will enhance learner's learning process.

S No	Question	Blooms Taxonomy Level	Course Outcome
ASSIGNMENT-I			
UNIT – I			
AIRPORT AS AN OPERATIONAL SYSTEM			
1	Differentiate commercial service airports and primary commercial service airports.	Understand	1
2	Explain the different types of general aviation airports, reliever airports, and commercial service airports.	Remember	1
3	What are the different plans involved in airport system planning explain briefly any one?	Understand	2
4	Describe complexity of airport operation and explain the role of operations done in airports.	Remember	2
5	Classify the types of airports and differentiate private airports and public use airports.	Understand	2
UNIT- II			
AIRPORT PLANNING			
1	Explain briefly about Financial plans, land use planning and environmental planning in the context of airports.	Remember	3
2	Briefly explain the ground handling responsibilities and Control of Ground Handling Efficiency.	Understand	3
3	Explain in detail about the difference between airport master plan and airport layout plan.	Remember	4
4	Explain about the major financial problems that could arise in airport planning?	Remember	4
5	What are routing cycles and routing generators? Differentiate between them.	Remember	5

S No	Question	Blooms Taxonomy Level	Course Outcome
UNIT- III			
GROUND HANDLING AND BAGGAGE HANDLING			
1	Derive the mathematical formulation problem of crew pairing, crew generator and crew rostering.	Remember	5
2	Explain the difference between docking guidance system and aircraft parking and information system.	Understand	6
3	Explain the term Control of ground handling efficiency and Discuss why control over ground handling efficiency is essential.	Understand	6
ASSIGNMENT-II			
4	Define the four main categories involved in order to deal with the growth in size and scale of baggage.	Remember	7
5	Define how the baggage loading has been segregated to assets speed and ease handling.	Remember	7
6	Define the linear configuration in check in and bag drop system with a neat sketch.	Remember	8
UNIT- IV			
PASSENGER TERMINAL OPERATIONS AND CARGO OPERATIONS			
1	Discuss the two philosophies of management of passenger at the airport terminal, and bring out the advantages and disadvantages of each?	Understand	8
2	Describe a typical turnaround of a cargo at an airport, explaining clearly the activities involved?	Remember	9
3	Explain clearly the difference between direct passenger services and airliner passenger services	Understand	9
4	Describe in detail about airline related passenger services and the airline related operational functions?	Understand	9
5	Define non-passenger related airport authority functions and airline related passenger services.	Remember	10
UNIT- V			
AIRPORT TECHNICAL SERVICES AND ACCESS			
1	Define Meteorology; briefly explain Meteorological Observations and Reports.	Remember	11
2	Describe briefly about the terms handling within the terminal and flow through the cargo terminal.	Understand	11
3	Explain in detail about different safety management systems in an airport and different regulatory authorities.	Understand	12
4	Explain about Air traffic control and different types of flight rules that are stated by air traffic control.	Remember	12
5	Write about different international aeronautical telecommunications services and different classifications in telecommunications services.	Understand	12

Prepared By: Ms. Y. Swetha , Assistant Professor, Dept of Aeronautical Engineering

HOD, AERONAUTICAL ENGINEERING