



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

AERONAUTICAL ENGINEERING

ASSIGNMENT QUESTIONS

Course Name	:	AVIONICS AND INSTRUMENTS &SYSTEMS
Course Code	:	A82129
Class	:	IV B.Tech II Semester
Branch	:	Aeronautical Engineering
Year	:	2018-2019
Course Coordinator	:	Ms. M. Mary Thraza, Assistant Professor, Department of Aeronautical Engineering.
Course Faculty	:	Ms. M. Mary Thraza, Assistant Professor, Department of Aeronautical Engineering.

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			
1	Explain the integration of a typical Attitude Detection Indicator to the Flight display.	Understand	2
2	Illustrate the primary flight display about A320 with a neat sketch?	Remember	3
3	List out different data busses presently in use in aircraft with their applications.	Understand	2
4	Describe the architecture of A-629 data buss with neat sketch indicating word format and its applications.	Understand	3
5	Explain the basic principle of VHF signal propagation	Understand	4
6	Discuss the basic principle of VHF communication and draw the block diagram of VHF Transmitter.	Remember	4
7	Write short notes on Audio integrating system-AIS (INTERCOM) of a civil aircraft.	Remember	4
8	Narrate the principle of HF communication with suitable diagrams.	Understand	3
9	What is a data Link? How it supplements communication system in HF & VHF.	Understand	4
10	Explain Transponder Landing System (TLS). Draw a neat sketch and list out the locations of antenna locations on a Boeing 777.	Understand	5
ASSIGNMENT-II			
1	Explain microwave landing system.	Understand	5
2	Write in detail about Localizer.	Remember	4
3	Explain in detail about the 'Flight Control Reference Planes'.	Understand	5
4	Illustrate how the flight control and monitoring are fulfilled?	Remember	4
5	Explain the Airbus model of FBW system?	Understand	5

S. No	Question	Blooms Taxonomy Level	Course Outcome
6	Describe in detail about Irreversible Flight Control system	Remember	4
7	Demonstrate in detail about Ground Proximity Warning system (GPW)	Understand	5
8	Discuss the needs of air-to-air refueling for military	Remember	4
9	Explain Electronic Warfare support measures.	Understand	9
10	Differentiate the navigation requirement between civil and military aviation.	Understand	5

Prepared By: Ms. M. Mary Thraza, Assistant Professor.

HOD, AE