Reg. No. :									
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Question Paper Code: 31579

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

Elective

Electronics and Instrumentation Engineering

01UEI913 - APPILICATION OF INSTRUMENTATION IN AEROSPACE AND NAVIGATION

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - $(10 \times 2 = 20 \text{ Marks})$

- 1. What is the purpose of using an artificial horizon?
- 2. What is bungee cylinder?
- 3. Name any four navigation system.
- 4. What is meant by emergency locator transmitter.
- 5. What is the functioning of GPS steering system?
- 6. What is stabilization control?
- 7. Define ply rating.
- 8. Mention the difference between defueling and jettison.
- 9. What is SELCAL?
- 10. What do you mean by purging the system?

PART - B (5 x 16	= 80 Marks)
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11.	(a)	Explain about the mechanism of servo altimeter with necessary diagram.	(16)					
		Or						
	(b)	Explain in detail about the electronic display used in aircrafts.	(16)					
12.	(a)	Elaborate about the functioning automatic direction finder with appropriate dia	gram. (16)					
	Or							
	(b)	Describe about smoke and fire detection system in a domestic aircraft.	(16)					
13.	(a)	Brief about the horizon sensing system.	(16)					
	Or							
	(b)	Explain in detail about the functioning of pitch and roll stabilization.	(16)					
14.	(a)	Briefly discuss about the operation of flight simulator and list some of its uses.	(16)					
Or								
	(b)	Explain in detail about the weapons system trainer.	(16)					
15.	(a)	Explain in detail about the measurement of fuel quantity by weight technique.	(16)					
Or								
	(b)	Explain in detail about the usage of black box and its operation.	(16)					