Sanjay Ghodawat University, Kolhapur

2018-19

EXM/P/09/01

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

Year and Program:2018-19	**School of Technology**	**Department of SY B.Tech**

Course Code: AET210	**Course Title: Avionic Engineering**	**Semester – IV**
Day and Date Thursday 30-05-2019	**End Semester Examination (ESE)**	**Time:** **Max Marks: 100** 3 Hrs. 10.30am to 1.30pm

Instructions:
1) All questions are compulsory.
2) Assume suitable data wherever necessary.
3) Figures to the right indicate full marks.

Q.1	**Attempt the following**	Marks	Bloom's Level	CO
a)	Discuss about the CRT and AMLCD in detail.	07	L2	CO1
	OR			
a)	Write about the regulatory and advisory agencies.	07	L2	CO1
b)	Explain what are HDD and HUD.	08	L2	CO2
	OR			
b)	Explain the intelligent display management, data fusion and ISIS	08	L2	CO2

Q.2	**Attempt the following**			
a)	What is an Inertial reference system? Discuss about the attitude deviation.	07	L2	CO2
	OR			
a)	Explain the Doppler Radar and RADALT in brief.	07	L2	CO4
b)	Briefly explain the Inertial Navigation system and GPS.	08	L2	CO4
	OR			
b)	Explain the following	08	L3	CO4

1. RNAV
2. FMS
3. GPWS
4. GNSS

Q.3		**Solve any Two**			
	a)	What do you understand about the Displays and Man machine interaction and the importance of avionics?	08	L_2	CO1
	b)	Explain in brief about LASERS and Night vision goggles.	08	L_3	CO4
	c)	What are the applications of Doppler and weather radar?	08	L_3	CO4
	d)	Describe the Global positioning system and give its applications.	08	L_2	CO4

Q.4		**Solve any Two**			
	a)	Write about HF, VHF and UHF.	09	L_2	CO4
	b)	Explain about the Typical systems in Aircrafts and discuss the pros and cons of it.	09	L_2	CO3
	c)	Briefly explain telemetry and transponders.	09	L_2	CO5

Q.5		**Solve any Two**			
	a)	Write about ARINC 429 and MLT-STD-1553B.	09	L_2	CO3
	b)	Explain the IEEE 1394 firewire and Fibre channel options.	09	L_3	CO5
	c)	Briefly explain STAGNAG 3910 and JWIAG.	09	L_2	CO5

Q.6		**Solve any Three**			
	a)	What are the basic radar systems and its types?	06	L_1	CO3
	b)	Explain the HF and VHF and brief.	06	L_2	CO3
	c)	Write about the evolution of avionics architecture.	06	L_2	CO1
	d)	Explain PI and TM bus.	06	L_2	CO5

ESE

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