


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2022			
Programme Name: B Tech (Aerospace Engineering with Spz. In Avionics)		Semester : VII	
Course Name : Digital Avionics		Time : 03 hrs	
Course Code : AVEG 4006		Max. Marks: 100	
Nos. of page(s) : 02			
Schematic diagrams are must in each answers			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	What are the major Avionics Systems used in the Aircraft technology?	4	CO1
Q 2	What is the principle of Altimeter?	4	CO2
Q 3	How FMS works? Discuss with the help of schematic diagram	4	CO3
Q 4	How Aircraft Avionics differs from Spacecraft Avionics?	4	CO 4
Q 5	Describe the databases and MIL STD for military aircraft operations	4	CO 4
SECTION B (4Qx10M= 40 Marks)			
Q 6	Discuss the architecture of ARINC 629. What are the various advantages?	10	CO4
Q 7	Describe the history of ARINC 429. How RT to BC and BC to RT, the data flows?	10	CO 3
Q 8	What are the various navigation systems used in aircraft? How the navigation plays important role in guiding the vehicles?	10	CO 2
Q 9	Describe the cockpit display system with all detailed descriptions.	10	CO 1
SECTION-C (2Qx20M=40 Marks)			
Q 10	Discuss all different types of displays used in the aircraft cockpit. Draw the schematic diagram	20	CO2
Q 11	Discuss each sub-systems of Bus controller in detail for the image as shown below.	20	CO 4

