Shri Shankaracharya Institute of Professional Management & Technology

Department of Electronics and Telecommuication Engineering

Class Test – I Session- Jan–June, 2023 Month- March

Sem- ET&T 8th sem Subject- Advanced Communication - D028811(028)

Time Allowed: 2 hrs Max Marks: 40

Note- ***Attempt any 5 Questions.***

Q. NO.	Questions	Marks	Levels of Bloom's taxonomy	COs
1.	a) State Keplers Law. b) Define the Following i) Earth Coverage ii) Slant Range iii) Transponders	[8]	Understanding	CO1
2.	Explain GPS in detail.	[8]	Understanding	CO1
3.	Differentiate between Geo and Non-Geo Communications Systems.	[8]	Understanding	CO1
4.	Derive the expression for Link Design Equation.	[8]	Understanding	CO2
5	What do you mean by System Noise Temperature. Derive the expression for G/T ratio.	[8]	Understanding	CO2
6	Explain in detail interference effects on complete link design	[8]	Understanding	CO2

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4.	Derive the expression for Link Design Equation.	[8]	Apply	CO2
5	What do you mean by System Noise Temperature. Derive the expression for G/T ratio.	[8]	Apply	CO2
6	Explain in detail interference effects on complete link design	[8]	Understanding	CO2

Shri Shankaracharya Institute of Professional Management & Technology
Department of Electronics and Telecommunication Engineering
Class Test – I Session- Jan– May, 2023 Month- March
Sem- ET&T 8th Subject- Radar and Navigational Aids – D028832(28)
Time Allowed: 2 hrs Max Marks: 40

Note: - ***Attempt any 5 question. All questions carry equal marks.***

Q. NO.	Questions	Marks	Levels of Bloom's taxonomy	COs
1.	Derive the radar range equation and mention its significance.	[8]	Understanding	CO1
2.	Derive an expression to find the flase alarm probability of false alarm in case of radar, also discuss the false alarm time.	[8]	Understanding	CO1
3.	An L-band radar operating at 1.25 GHz uses a peak pulse power of 3 MW and must have a range of 185.2 km for objects whose radar cross section is 1 m^2 . If $P_{min}= 2\times10^{-13}$ W. What is the smallest diameter the antenna reflectoe should have assume it to be a parabolid with $\eta = 0.5$?	[8]	Applying	CO1
4.	Draw the basic block diagram of pulse RADAR and explain various block in brief.	[8]	Understanding	CO1
5.	Draw the block diagram of sequentional lobing tracker radar and explain its operation	[8]	Understanding	CO2
6.	How dalay line cancellor works? Explain with example.	[8]	Understanding	CO2
7.	Write a short notes on monopulse tracking.	[8]	Understanding	CO2

Shri Shankaracharya Institute of Professional Management & Technology
Department of Electronics and Telecommunication Engineering
Class Test – I Session Jan.–June, 2023 Month- March
Sem- 8th Subject- Environmental Science D000801(094)
Time Allowed: 2 hrs Max Marks: 40

*Note: - **Attempt any 5 question. All questions carry equal marks.***

Q. NO.	Questions	Marks	Levels of Bloom's taxonomy	COs
1.	What is air pollution? Write its causes, effects and control measures.	[2+6]	Understanding	CO1
2.	Define water pollution. Discuss different types of waste water treatment.	[2+6]	Understanding	CO1
3.	Write note on followings- a. Recycling b. Composting	[4+4]	Understanding	CO1
4.	Describe different methods of solid waste management.	[8]	Understanding	CO1
5.	What is ecological pyramid? Describe different types of ecological pyramids.	[2+6]	Understanding	CO2
6.	Explain- a. Differentiate between food chain and food web b. Note on forest ecosystem	[4+4]	Understanding	CO2
7.	Define ecosystem. Describe different components of an ecosystem.	[8]	Understanding	CO2

Shri Shankaracharya Institute of Professional Management & Technology
Department of Electronics and Telecommunication Engineering
Class Test – I Session Jan.–June, 2023 Month- March
Sem- 8th Subject- Environmental Science D000801(094)
Time Allowed: 2 hrs Max Marks: 40

*Note: - **Attempt any 5 question. All questions carry equal marks.***

Q. NO.	Questions	Marks	Levels of Bloom's taxonomy	COs
1.	What is air pollution? Write its causes, effects and control measures.	[2+6]	Understanding	CO1
2.	Define water pollution. Discuss different types of waste water treatment.	[2+6]	Understanding	CO1
3.	Write note on followings- a. Recycling b. Composting	[4+4]	Understanding	CO1
4.	Describe different methods of solid waste management.	[8]	Understanding	CO1
5.	What is ecological pyramid? Describe different types of ecological pyramids.	[2+6]	Understanding	CO2
6.	Explain- a. Differentiate between food chain and food web b. Note on forest ecosystem	[4+4]	Understanding	CO2
7.	Define ecosystem. Describe different components of an ecosystem.	[8]	Understanding	CO2