



Shri Shankaracharya Institute of Professional Management & Technology
Department of Electronics and Telecommunication Engineering

Class Test – II Session- July– Dec, 2022 Month- January

Sem- ET&T 7th Subject- RF and Microwave Engineering – D028711(028)

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.	Explain the working of a Tunnel Diode	[8]	Remembering	CO4
2.	Write a short note on a) TRAPATT, b)IMPATT	[8]	Understanding	CO4
3.	Explain the operation of Magic Tee. Why is a hybrid E-H plane Tee referred as Magic Tee. Derive scattering matrix for magic tee	[8]	Remembering	CO4
4.	Define VSWR. Explain the principle of operation and application of VSWR meter	[8]	Remembering	CO5
5.	Draw the block diagram showing working of a Satellite communication system	[8]	Understanding	CO5
6.	Explain the working of a RADAR with the help of a block diagram	[8]	Remembering	CO5
7.	Describe Bipolar microwave transistor in terms of structure, operation and characteristics	[8]	Understanding	CO4



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Class Test – II Session- July-Dec, 2022 Month- January

Sem- ET&T 7th Subject- Entrepreneurship Essentials D000741(033)

Time Allowed: 2 hrs Max Marks: 40

Note: - Q.1 is compulsory and attend any 4 from 2,3,4,5,6.

Q. NO.	Questions	Marks	Levels of Bloom's taxonomy	COs
1.	How will you differentiate in small scale ,medium scale and large scale enterprise.	[8]	Understanding	CO3
2.	Write a short notes on a) Proprietorship b) Capital structure and source of financing	[8]	Understanding	CO3
3.	Explain importance of Small Enterprises in development of Economy.	[8]	Understanding	CO3
4.	what are the method of project evaluation.	[8]	Apply	CO4
5.	Write an example of Making detailed project report.	[8]	Apply	CO4
6.	What is Internal Rate of return method.	[8]	Apply	CO4



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Shri Shankaracharya Institute of Professional Management & Technology
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Class Test – II Session- July. – Dec, 2022 Month- January
Sem- 7th Subject- Wireless Communication - D028713(028)

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.	Explain MSK and GMSK.	[8]	Understanding	CO4
2.	Explain High Speed Circuit Switched Data (HSCSD).	[8]	Understanding	CO4
3.	Explain ground Reflection model & knife edge diffraction model	[8]	Understanding	CO3
4.	Explain MIMO system.	[8]	Understanding	CO3
5.	State Difference between wireless and fixed telephone networks.	[8]	Understanding	CO5
6.	Explain traffic routing in wireless networks	[8]	Understanding	CO5



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Class Test – II Session- July. – Dec, 2022 Month- January
Sem- 7th Subject- Wireless Communication - D028713(028)

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Shri Shankaracharya Institute of Professional Management & Technology
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Class Test – II Session- July– Dec, 2022 Month- January
Sem- ET&T 7th Subject- Instrumentation & IoT – D028712(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.	Describe the construction, working, advantages and limitations of Bimetallic thermometers.	[8]	Understanding	CO3
2.	Explain the theory of thermocouples.	[8]	Understanding	CO3
3.	Explain working of total radiation pyrometer.	[8]	Understanding	CO3
4.	Describe the different components of IoT.	[8]	Understanding	CO4
5.	Differentiate between M2M and IoT.	[8]	Understanding	CO4
6.	What are the technological issues in RFID IoT system design?	[8]	Understanding	CO5
7.	With a neat sketch explain home automation system.	[8]	Apply	CO5



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Class Test – II Session- July-December, 2022 Month- January

Sem- ET&T 7th Subject- Power Electronics D028735(028)

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	CO
1.	Explain the TRIAC based AC Voltage Controller	[8]	Understanding	C05
2.	With the help of circuit diagram & waveform explain working of three phase to single phase cycloconverter	[8]	Understanding Analyze	C05
3.	Explain the Operation of 120° conduction mode of 3 phase bridge inverter feeding star connected purely resistive load with relevant waveform.	[8]	Understanding Analyze	C04
4.	Explain the Basic working principle of single phase half bridge inverter R, R-L, R-L-C (over & underdamped) Load.	[8]	Understanding	C04
5.	Explain operation of three phase full controlled bridge converter with associated waveform.	[8]	Understanding	C03
6.	Explain single phase dual converter & its working.	[8]	Understanding	C03

“ Work hard, Dream Big, Never Giveup”

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Sem- ET&T 7th Subject- Power Electronics D028735(028)

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	CO
1.	Explain the TRIAC based AC Voltage Controller	[8]	Understanding	C05
2.	With the help of circuit diagram & waveform explain working of three phase to single phase cycloconverter	[8]	Understanding Analyze	C05
3.	Explain the Operation of 120° conduction mode of 3 phase bridge inverter feeding star connected purely resistive load with relevant waveform.	[8]	Understanding Analyze	C04
4.	Explain the Basic working principle of single phase half bridge inverter R, R-L, R-L-C (over & underdamped) Load.	[8]	Understanding	C04
5.	Explain operation of three phase full controlled bridge converter with associated waveform.	[8]	Understanding	C03
6.	Explain single phase dual converter & its working.	[8]	Understanding	C03

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