

Roll No.:

SGT UNIVERSITY

END TERM THEORY EXAMINATION JULY-2022

Faculty/College of Study:	Engineering & Technology	Year/Semester:	6 th Semester
Program:	B.Tech. (ECE)	Duration:	03:00 Hrs
Course/Subject:	Microwave & Radar	Maximum Marks:	60
Course/Subject Code:	13040615	Batch:	2018

Instructions:-

1. Write Your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided correct question paper. Complaint(s) in this regard, if any should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. All Questions are compulsory. Marks are indicated against each question.
4. Illustrate your answer with diagram wherever required.

SECTION-A

(Very Short Answer Type Questions)

Note: All Questions are compulsory: -

[12X1=12 Marks]

S. No.	Question	Marks Allotted
1	Define Transmission lines.	1
2	What is Waveguides?	1
3	What is Microwave & Radar?	1
4	What is the meaning of Tee structure?	1
5	Draw the diagram of PNP transistor.	1
6	Define Impedance.	1
7	What is called RF Diode?	1
8	Why we use Ferrite material?	1
9	What is S matrix?"	1
10	What is the PIN diode?	1
11	What is the use of GUNN diode?	1
12	Write one feature of Varactor Diode?	1

SECTION-B
(Short Answer Type Questions)

Note: All Questions are compulsory: -

[4X2=8 Marks]

S. No.	Question	Marks Allotted
13	Define Propagation in TE Mode.	2
14	Define Rectangular wave guide.	2
15	What is Propagation?	2
16	Describe the uses of S Matrix?	2

SECTION-C
(Descriptive Answer Type Questions)

Note: All Questions are compulsory: -

[4X4=16 Marks]

S. No.	Question	Marks Allotted
17	Write a short note on comparison with Transmission lines.	4
18	Write a short note about Planar transmission lines.	4
19	Write a note on Data Hazards.	4
20	Draw the structure of Hybrid Tee? Why this Tee is called magic Tee?	4

SECTION-D
(Long Answer Type Questions)

Note: All Questions are compulsory: -

[4X6=24 Marks]

S. No.	Question	Marks Allotted
21	Explain TEM mode in rectangular wave guide.	6
22	Explain Introduction to circular waveguides.	6
23	What are the various technique used for the power measurement?	6
24	Draw the constructional diagram of Klystron amplifier & also explain the operation?	6