



SRI BHARATHI

ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
Kaikkurichi, Pudukkottai -622 303

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NAAC DOCUMENTS



Quality Indicator Frame Work

Criterion – 2

Teaching-Learning and Evaluation

Submitted by

IQAC

Internal Quality Assurance Cell

Sri Bharathi Engineering College for Women



Criteria 2

Teaching-Learning and Evaluation

350

Key Indicator- 2.3. Teaching- Learning Process (40)

2020-2021

**ELECTRONICS AND
COMMUNICATION ENGINEERING**

PROBLEM SOLVING

Activity	Number of Students Attended	Page No.
Tutorial	40	3
TOTAL STUDENTS ATTENDED	40	-



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Criteria 2	Teaching-Learning and Evaluation	350
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Key Indicator- 2.3. Teaching- Learning Process (40)

2020-2021

**ELECTRONICS AND
COMMUNICATION ENGINEERING**

PROBLEM SOLVING

TUTORIAL



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR (2020-2021)

PROBLEM SOLVING METHOD

LIST OF STUDENTS II YEAR ECE- PROBLEM SOLVING METHOD

SL.NO	REG.NO	NAME	YEAR/SEM	LEARNING METHOD
1.	912619106001	AASHIMA M	II/III	PROBLEM SOLVING METHOD -TUTORIAL MA8451 -PROBABILITY AND RANDOM PROCESS
2.	912619106002	ANANTHI P	II/III	
3.	912619106004	JAFFARNISHA R	II/III	
4.	912619106005	MAHESWARI K	II/III	
5.	912619106006	MANISHA S	II/III	
6.	912619106007	MEGAVADHANA A	II/III	
7.	912619106008	PRIYANGA R	II/III	
8.	912619106009	RAGAVI V	II/III	
9.	912619106010	RAJAPRABA M	II/III	
10.	912619106011	SASIKA K	II/III	

N. Vithya
Name and signature of the faculty Incharge

(N.Vithya)

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Dr. S.THILAGAVATHI M.E., Ph.D.,
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Tutorial Answer Sheet

Name of the Student: *M. Aashima*

AU Register Number: *912619106001*

Tutorial – 01			Date of Issue:	25.08.20	Marks	10
Course code	MA8451	Course Title	Probability and Random Processes			
Year	II	Semester	III	Date of Submission:	29.08.20	

Q.No	Questions	CO
1	The density function of a random variable X is given by $2 \leq x \leq 6$, $f(x) = kx^{-2}$ ($kx=f(x)$) Find k, mean, variance and r th moment.	C203.1
2	In a certain city, the daily consumption of electric power in millions of kilowatt hours can be treated as a RV having Gamma distribution with parameters $\lambda = \frac{1}{2}$ and $k = 3$. If the power plant of this city has a daily capacity of 12 million kilowatts – hours, Find the probability that this power supply will be inadequate on any given day?	C203.1
3	The length of time a person speaks over phone follows exponential distribution with mean 6 mins. What is the probability that the person will talk for (1) more than 8 mins, (2) between 4 and 8 mins.	C203.1

Mark Allocation

Rubrics	Marks Allocated	Marks obtained
Problem solving approach	6	5
Correctness of Answer	2	1
Timely submission	2	2
Total marks	10	8

Name and Signature of the Faculty In charge

(N. Vithal)

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ACADEMIC YEAR (2020-2021)

PROBLEM SOLVING METHOD

LIST OF STUDENTS III YEAR ECE- PROBLEM SOLVING METHOD

SL.NO	REG.NO	NAME	YEAR/SEM	LEARNING METHOD
1.	912618106001	ANUSHAA S	III/VI	PROBLEM SOLVING METHOD-TUTORIAL ECE651-TRANSMISSION LINES AND RF SYSTEMS
2.	912618106002	ARIVARASI A	III/VI	
3.	912618106003	ASMATH HAZEENA N	III/VI	
4.	912618106004	ATCHAYA R	III/VI	
5.	912618106005	JAYAPRIYA T	III/VI	
6.	912618106006	JAYASRI M	III/VI	
7.	912618106007	NAGALAKSHMI P	III/VI	
8.	912618106008	NAVITHRA D	III/VI	
9.	912618106009	ROHINI K	III/VI	
10.	912618106010	SOUNTHARYA P	III/VI	
11.	912618106012	THAIYAL NAYAGI K	III/VI	
12.	912618106701	JANANI R	III/VI	

Name and signature of the faculty Incharge

C. PALANIAPPAN AP/ECE)

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Tutorial Answer Sheet

Name of the Student: D. Navithra

AU Register Number 912618106008

Tutorial – 01			Date of Issue:	24.08.20	Marks	10
Course code	EC8651	Course Title	Transmission Lines and RF systems			
Year	III	Semester	VI	Date of Submission:	28.08.20	

Q.No	Questions	CO
1	A telephone cable 64 km long has a resistance of 13 ohms/km and a capacitance of 0.008 micro farad/km. Calculate attenuation constant, velocity and wavelength of the line at 1000 HZ.	C203.1
2	A communication link has $R = 10.4$ ohm/km, $L = 3.67$ mH/km, $G = 0.08$ μ mho/km and $C = 0.0083$ μ F/km. Determine the characteristic impedance, propagation constant, phase constant, velocity of propagation, sending end current and receiving end current for given frequency $f = 1$ kHz, sending end voltage is 1 volts and transmission line length is 100km.	C203.1
3	A loss less line has a SWR of 4. The R_0 is 150 ohms and the maximum voltage measured in the line is 135V. Find the power delivered to the load	C203.1

Mark Allocation

Rubrics	Marks Allocated	Marks obtained
Problem solving approach	6	4
Correctness of Answer	2	2
Timely submission	2	2
Total marks	10	8

Name and Signature of the Faculty In charge

[C. P. ANIAPPAN A/PIECE]

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ACADEMIC YEAR (2020-2021)

PROBLEM SOLVING METHOD

LIST OF STUDENTS IV YEAR ECE- PROBLEM SOLVING METHOD

SL.NO	REG.NO	NAME	YEAR/SEM	LEARNING METHOD
1.	912617106001	ABIRAMI S	IV/VII	PROBLEM SOLVING METHOD- TUTORIAL EC8751- OPTICAL COMMUNICATION
2.	912617106002	ABISHEKA S	IV/VII	
3.	912617106003	ATSHAYA R	IV/VII	
4.	912617106004	BAVADHARANI A	IV/VII	
5.	912617106005	BHUVANESHWARI B	IV/VII	
6.	912617106006	DHIVYA L	IV/VII	
7.	912617106007	GOWSALYA D	IV/VII	
8.	912617106009	INDHUMATHI S	IV/VII	
9.	912617106010	KANIMOZHI D	IV/VII	
10.	912617106011	KAVYA C	IV/VII	
11.	912617106012	KEERTHANA G	IV/VII	
12.	912617106013	MAHESHWARI G	IV/VII	
13.	912617106014	MANOHARI M	IV/VII	
14.	912617106015	MARAGATHALAKSHMI S	IV/VII	
15.	912617106017	SAFRIN NISHA S	IV/VII	
16.	912617106018	SUBASHINI M	IV/VII	
17.	912617106019	SUBASHINI T	IV/VII	
18.	912617106020	VINTHIYA R	IV/VII	

Name and signature of the faculty Incharge

[T.K. Mohanapriya]

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Tutorial Answer Sheet

Name of the Student: M. Subasini

AU Register Number: 912617106018

Tutorial – 01			Date of Issue:	24.08.20	Marks	10
Course code	EC8751	Course Title	Optical communication			
Year	IV	Semester	VII	Date of Submission:	28.08.20	

Q.No	Questions	CO
1	A step-index silica fiber with a core radius much longer than the operating wavelength of light has a core refractive index of 1.50 and a cladding refractive index of 1.48. Estimate the values of a) Numerical aperture of the fiber. b) Maximum acceptance angle in air. c) Maximum acceptance angle in water having a refractive index of 1.33.(6)	C702.1
2	Analyze the wave equations for a step-index fiber and the normalized Frequency or V-number for modes in cylindrical optical fibers.	C702.1
3	Demonstrate the Transverse Electric and Transverse Magnetic Modes in cylindrical optical fibers with necessary diagram.	C702.1

Mark Allocation

Rubrics	Marks Allocated	Marks obtained
Problem solving approach	6	5
Correctness of Answer	2	2
Timely submission	2	2
Total marks	10	9

Name and Signature of the Faculty In charge

S.K. J.
[S.K. Mohana Priya]

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