E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai
(Accredited by NAAC with 'A' Grade and NBA)
Email: principal@egspec.org website: www.egspec.org Ph: 04365-251112

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSES

ACADEMIC YEAR

2018-2019

Name of the value added courses offered	Program	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Introduction to 3G & 4G Wireless Communications	UG	2	36 Hours	119	115
Web Development using PHP & MYSQL	UG	2	36 Hours	123	123
Cloud Infrastructure and Services	UG	1	36 Hours	95	95
Analysis of Cryptology Techniques & Algorithms	PG	1	40 Hours	26	26

HOD/CSE
HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002,
Nagapattinam (Dt) Tamil Nadu.

E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)
NAGAPATTINAM, TAMILNADU, INDIA – 611002
Approved by AICTE, New Delhi & Affiliated to Anna University,Chennai
An ISO 9001: 2008 Certified Institution

Department Of Computer Science & Engineering

Organized

ONE WEEK

VALUE ADDED COURSE

ON

INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS

Dates: 06.05.2019 – 11.05.2019
&
13.05.2019 – 18.05.2019

COORDINATOR
Dr.N.Murali, ASP/CSE
Department of CSE
E.G.S Pillay Engineering College.
Nagapattinam – 611002.

CONVENOR
Dr.S.Kannan, Professor
Department of CSE
E.G.S Pillay Engineering College
Nagapattinam – 611002.

EGS PILLAY ENGINEERING COLLEGE – NAGAPATTINAM

DEPARTMENT OF CSE

Value Added Course on

"Introduction to 3G & 4G Wireless Communications"

TABLE OF CONTENT

HOD/CSE

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

REQUISITION LETTER

Date: 26.04.2019

From

Dr.N.Murali,
Associate Professor/CSE,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

To

The Principal,
E.G.S.Pillay Engineering College,
Nagapattinam.

Through

The Head of Department,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

Respected Sir,

Sub: Value Added Course – Reg

We are happy to inform you that we have planned to organize one week value added course on title **"Introduction to 3G & 4G Wireless Communications"** for UG II Year CSE Students from 06.05.2019 to 11.05.2019 for Batch I and from 13.05.2019 to 18.05.2019 for Batch II. Herewith, I enclosed name list with batch and session details. Kindly give permission for conducting the value added course.

Thanking you,

Yours sincerely,

[Dr.N.Murali]

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Convener

Dr.S.Kannan
Professor/ CSE
EGSPEC

Coordinator

Dr.N.Murali
ASP/CSE

Speakers

Mr.S.Praveenkumar
AP/CSE
&
Mr.M.Rajakaumaran
AP/CSE

ATTESTED

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Nagapattinam (Dt) Tamil Nadu

Beneficiaries

UG II CSE Students

Course Duration

36 Hours

ABOUT THE COURSE

The value added course Introduction to 3G & 4G wireless communications provide students with an overview of the concepts wireless communication and its advancements. The telecommunication industry witnessed a boom in packet based data application services providing high quality of service for mobile applications in a cost effective manner. to satisfy the ever increasing demand for higher throughput and data rates, wireless communication systems need to operate in wider bandwidths 3G support very high data rate transmission in its new LTE advanced standards. A 4G system must provide capabilities defined by ITU in IMT Advanced.

Dates:

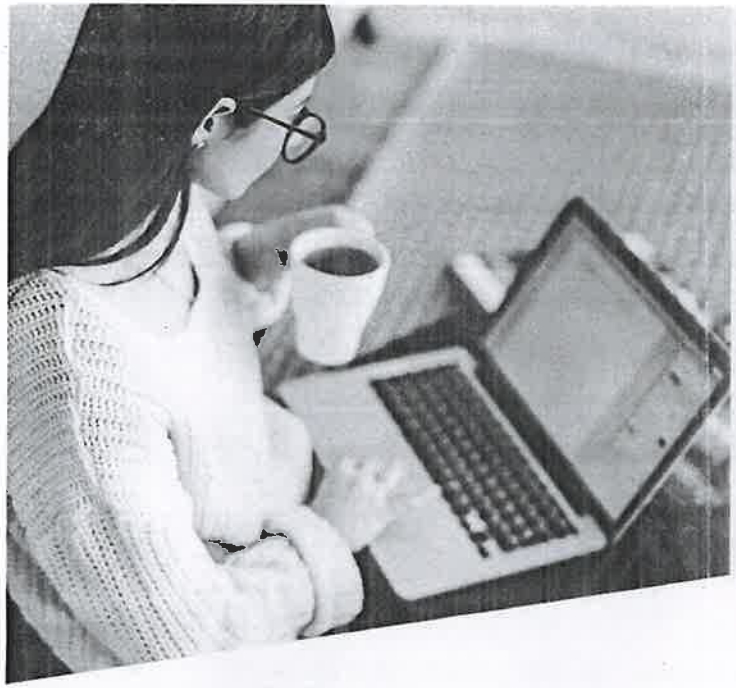
(Batch I)
06/05/2019 - 11/05/2019
(Batch II)
13/05/2019 - 18/05/2019

Contact us
+91-4365 251112/251114

ONE WEEK VALUE ADDED COURSE ON INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS

Organized by
Department of CSE

E.G.S.Pillay Engineering College
(Autonomous)
NAGAPATTINAM



ABOUT THE COLLEGE

EGS Pillay Engineering College was started in the year 1995 under the sponsorship of G. S. Pillay & Sons Educational and Charitable Trust. College has gained the reputation of being most preferred engineering college by the students. College is approved by the AICTE, New Delhi and is affiliated to Anna University from 2002 and the degrees are awarded by Anna University, as per the Government Orders. It is ISO 9001:2008 certified.

ATTESTED
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The College has earned the reputation of being one of the most preferred colleges by the students and parents all these years. Known for its excellent infrastructure and facilities for learning, the outstanding non-grant engineering college has registered impressive performance consistently. A gate-way to success, the college has now set on long-range planning to enlarge and enrich its programs and activities to

- To recognize the foundations of wireless communications.
- To identify wireless communications systems.
- To identify cellular system concepts.
- To describe wireless channel characteristics.
- To distinguish between different Multiple Access schemes.

This course consists of following modules:

WIRELESS COMMUNICATIONS AND DIVERSITY

Introduction to 3G/4G Standards - Wireless Channel and Fading - Rayleigh Fading and BER of Wired Communication - BER for Wireless Communication - Introduction to Diversity, Multi-antenna Maximal Ratio Combiner - BER with Diversity, Spatial Diversity and Diversity Order

BROADBAND WIRELESS CHANNEL MODELLING

Wireless Channel and Delay Spread, Coherence Bandwidth of the Wireless Channel- ISI and Doppler in Wireless Communications- Doppler Spectrum and Jakes Model- Cellular Communication: Introduction to Cellular Communications - Frequency reuse - Multiple Access Technologies, Cellular Processes - Call Setup, Handover etc., Teletraffic Theory.

CDMA & OFDM

Introduction to CDMA - Walsh codes - Variable tree OVSF - PN Sequences - Multipath diversity - RAKE Receiver - CDMA Receiver Synchronization. OFDM: Introduction to OFDM - Multicarrier Modulation and Cyclic Prefix - Channel model and SNR performance - OFDM Issues - PAPR, Frequency and Timing Offset Issues.

MIMO & UWB

MIMO:Introduction to MIMO, MIMO Channel Capacity -SVD and Eigenmodes of the MIMO Channel - MIMO Spatial Multiplexing - BLAST, MIMO Diversity - Alamouti, OSTBC, MRT, MIMO - OFDM. UWB (Ultra wide Band): UWB Definition and Features - UWB Wireless Channels - UWB Data Modulation - Uniform Pulse Train, Bit - Error Rate Performance of UWB.

ABOUT THE DEPARTMENT

Department of Computer Science and Engineering programme was introduced at Edayathangudy G.S.Pillay Engineering College in the Academic Year 1995-1996. The demand for Computer Engineers in software companies, banking sectors and private sectors engaged in developing new trends of software generation is more than the engineers available.

The department has Recognized Research Centre for doing PhD / M.S. (By Research), obtained Permanent Affiliation from Anna University in the year 2014-15. The department has formed student association namely Computer Engineers Association (CEA) to promote talent of the students and their upliftment. The department has highly qualified and experienced faculties. The department has well experienced faculties in the research and more number of publications in reputed Journals and Conferences.

The department has well infrastructural facilities. From 2011 onwards every year, we are conducting International and National conferences. The B.E (CSE) programme was accredited by NBA in the year 2016 and reaccredited in the year 2019 for next three years.

Certificate will be issued to all participants on successful

E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM.
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

EGSPEC/CSE/UG/VAC/2018-19/03 **Date: 03.05.2019**

CIRCULAR

It is to inform that Department of Computer Science and Engineering is going to organize a Value Added Course on **"Introduction to 3G & 4G Wireless Communications"** from 06.05.2019 to 11.05.2019 for Batch I and from 13.05.2019 to 18.05.2019 for Batch II (36 hours/Batch) by, **Mr.S.Praveenkumar,** Assistant Professor & **Mr.M.Rajakumaran,** Assistant Professor, Department of Computer Science and Engineering, E.G.S.Pillay Engineering College (Autonomous), Nagapattinam for the benefits of II year CSE Students. All the enrolled students are instructed to attend the course without fail.

Timings: 9:15 am -- 4:45 pm

Venue: SJB 110

CONVENER

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Nagapattinam - 611 002

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E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Value Added Course on *"Introduction to 3G & 4G Wireless Communications"*

PROGRAM SCHEDULE

Dates: BATCH I : 06.05.2019 – 11.05.2019 & BATCH II : 13.05.2019 – 18.05.2019

Session / Date	I 9:15 – 10:45 AM	II 11:00 - 1:00 PM	III 2:00 – 3:30 PM	IV 3:45 – 4:45 PM
DAY 1	Introduction to 3G/4G Standards, Wireless Channel and Fading	Rayleigh Fading and BER of Wired Communication, BER for Wireless Communication	Introduction to Diversity, Multi-antenna Maximal Ratio Combiner, BER with Diversity	Spatial Diversity and Diversity Order
DAY 2	Wireless Channel and Delay Spread, Coherence Bandwidth of the Wireless Channel	ISI and Doppler in Wireless Communications, Doppler Spectrum and Jakes Model	Cellular Communication: Introduction to Cellular Communications, Frequency reuse, Multiple Access Technologies	Cellular Processes, Call Setup, Handover etc., Teletraffic Theory.
DAY 3	Introduction to CDMA, Walsh codes, Variable tree OVSF, PN Sequences	Multipath diversity, RAKE Receiver, CDMA Receiver Synchronization	OFDM: Introduction to OFDM, Multicarrier Modulation and Cyclic Prefix	Channel model and SNR performance OFDM Issues
DAY 4	PAPR, Frequency and Timing Offset Issues.	MIMO:Introduction to MIMO, MIMO Channel Capacity, SVD and Eigenmodes of the MIMO Channel	MIMO Spatial Multiplexing, BLAST, MIMO Diversity, Alamouti,	OSTBC, MRT
DAY 5	MIMO, OFDM.	UWB (Ultra wide Band):UWB Definition and Features, UWB Wireless Channels	UWB Data Modulation, Uniform Pulse Train	Bit, Error Rate Performance of UWB.
DAY 6	GSM, GPRS	WCDMA,	LTE, WIMAX	Assessment Test

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SYLLABUS

VALUE ADDED COURSE ON INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS		
COURSE OBJECTIVES:		
	1. To develop an understanding about the fundamental concepts of communications.	
	2. To equip the students with wireless communications concepts including basic taxonomy and terminologies.	
Module I	**WIRELESS COMMUNICATIONS AND DIVERSITY**	**7 Hours**
Introduction to 3G/4G Standards - Wireless Channel and Fading - Rayleigh Fading and BER of Wired Communication - BER for Wireless Communication - Introduction to Diversity, Multi-antenna Maximal Ratio Combiner - BER with Diversity, Spatial Diversity and Diversity Order		
Module II	**BROADBAND WIRELESS CHANNEL MODELLING**	**7 Hours**
Wireless Channel and Delay Spread, Coherence Bandwidth of the Wireless Channel- ISI and Doppler in Wireless Communications- Doppler Spectrum and Jakes Model- Cellular Communication: Introduction to Cellular Communications - Frequency reuse - Multiple Access Technologies, Cellular Processes - Call Setup, Handover etc., Teletraffic Theory.		
Module III	**CDMA & OFDM**	**8 Hours**
Introduction to CDMA - Walsh codes - Variable tree OVSF - PN Sequences - Multipath diversity - RAKE Receiver - CDMA Receiver Synchronization. OFDM: Introduction to OFDM - Multicarrier Modulation and Cyclic Prefix - Channel model and SNR performance - OFDM Issues - PAPR, Frequency and Timing Offset Issues.		
Module IV	**MIMO & UWB**	**8 Hours**
MIMO:Introduction to MIMO, MIMO Channel Capacity -SVD and Eigenmodes of the MIMO Channel - MIMO Spatial Multiplexing - BLAST, MIMO Diversity - Alamouti, OSTBC, MRT, MIMO - OFDM. UWB (Ultra wide Band): UWB Definition and Features - UWB Wireless Channels - UWB Data Modulation - Uniform Pulse Train, Bit - Error Rate Performance of UWB		
Module V	**3G AND 4G WIRELESS STANDARDS**	**6 Hours**
GSM, GPRS, WCDMA, LTE, WIMAX		
	Total:	**36 Hours**

COURSE OUTCOMES:	
	After completion of the course, Student will be able to
CO1	Understand the basic concepts of wireless communications.
CO2	Apply the cellular concepts to evaluate the signal reception performance in a cellular network.
CO3	Analyze Multiuser Systems, CDMA, WCDMA network planning and OFDM Concepts.
CO4	Design wireless communication systems with key 3G and 4G technologies.
CO5	Develop technical and listening skills for effective communication.

REFERENCES:

1. Principles of Modern Wireless Communication Systems-Aditya K. Jagannatham, Publisher-McGraw Hill..
2. Fundamentals of Wireless Communications - David Tse and Pramod Viswanath, Publisher - Cambridge University Press.

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Nagapattinam (Dt) Tamil Nadu.

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF CSE

VALUE ADDED COURSE ON

"INTRODUCTION TO 3G&4G WIRELESS COMMUNICATIONS"

ENROLLMENT LIST

S.No	Register Number	Name of Student	BATCH
1.	E17CSR001	AANANI D	I
2.	E17CSR002	AARTHI K	I
3.	E17CSR004	ABINAYA K	I
4.	E17CSR005	ABINAYASRI G	I
5.	E17CSR006	ABINESHA K	I
6.	E17CSR007	ABISHEK J	I
7.	E17CSR008	AJITHA J	I
8.	E17CSR010	AKASHRAJ M	I
9.	E17CSR011	AMRITHA K	I
10.	E17CSR012	AMSAVARDHINI R	I
11.	E17CSR013	ARTHI P	I
12.	E17CSR014	ATCHAYA E	I
13.	E17CSR015	BABIN B	I
14.	E17CSR017	BHARATH KUMAR R	I
15.	E17CSR018	BHAVADHARSHINI B	I
16.	E17CSR019	BHUVANESHWARI R	I
17.	E17CSR021	DEEPA P	I
18.	E17CSR022	DEEPIGA G	I
19.	E17CSR023	DEVADHARSHINI G	I
20.	E17CSR024	DEVIPRIYA R	I
21.	E17CSR025	DHAKSHNASUDHAN R	I
22.	E17CSR026	DHINESH K	I
23.	E17CSR027	DHIVYABHARATHI S	I
24.	E17CSR028	DINESH V	I
25.	E17CSR029	DIVYABHARATHI R	I
26.	E17CSR030	DURGADEVI R	I
27.	E17CSR032	ESWARI T	I
28.	E17CSR033	FAIROSEBANU A	I
29.	E17CSR034	FATHIMA BEEVI M	I
30.	E17CSR035	GANGADEVI T	I
31.	E17CSR036	GAYATHRI S	I
32.	E17CSR037	GEETHA A	I
33.	E17CSR038	HARIHARAN E	I
34.	E17CSR039	HASSIM ASLAM S	I
35.	E17CSR040	HEMA R	I
36.	E17CSR041	JAISURYA K	I
37.	E17CSR042	JAYADHARANI C	I
38.	E17CSR043	JEEVANANTHAM S	I
39.	E17CSR044	JENITHA M	I
40.	E17CSR045	JINSI S	I
41.	E17CSR046	KAYATHRI V	I
42.	E17CSR047	KEERTHANA R	I

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43.	E17CSR048	KEERTHIKA J	I
44.	E17CSR049	KIRUBAKARAN K	I
45.	E17CSR050	KISHORE G	I
46.	E17CSR051	KUMARAN R	I
47.	E17CSR052	MADHURI D	I
48.	E17CSR053	MAHESWARI V	I
49.	E17CSR055	MANOJKUMAR M	I
50.	E17CSR056	MATHANRAJ C	I
51.	E17CSR057	MEENAKSHI J	I
52.	E17CSR058	MEERA R	I
53.	E17CSR059	MOHAMED SALMAN FASITH S	I
54.	E17CSR060	MOHAMED YUSUF M	I
55.	E17CSR061	MONISHA P	I
56.	E17CSR062	MURUGESWARI V	I
57.	E17CSR063	MUTHUKARTHIGA S	I
58.	E17CSR064	NANTHINI BHARATHI R	I
59.	E17CSR065	NIRMAL T	I
60.	E17CSR066	NITHISHKUMAR I	I
61.	E17CSR067	NIVEDHITHA D	II
62.	E17CSR068	PAVITHRA M P	II
63.	E17CSR069	POONTHAMIZH P	II
64.	E17CSR070	PRADEEPA A	II
65.	E17CSR071	PRAVINKUMAR M	II
66.	E17CSR072	PREETHA S	II
67.	E17CSR073	PREETHI V	II
68.	E17CSR074	PRINCE SUJA K	II
69.	E17CSR075	PRIYADHARSHINI J	II
70.	E17CSR076	PRIYADHARSHINI R	II
71.	E17CSR077	PRIYADHARSHINI V	II
72.	E17CSR078	PRIYANKA R	II
73.	E17CSR079	PUNITHA S	II
74.	E17CSR080	RAHUL R	II
75.	E17CSR081	RAJESHWARI M	II
76.	E17CSR082	RAM PRASATH R K	II
77.	E17CSR083	RANJANI DEVI T	II
78.	E17CSR084	RAVIKUMAR P	II
79.	E17CSR085	RAVINA R	II
80.	E17CSR086	SAMEERABANU M	II
81.	E17CSR087	SAMUVEL R	II
82.	E17CSR089	SANTHOSH M	II
83.	E17CSR090	SATHISWARAN M	II
84.	E17CSR091	SATHYAPRIYA M	II
85.	E17CSR092	SELVAKUMARI R	II
86.	E17CSR093	SELVAMUTHUKUMARAN R	II
87.	E17CSR094	SHAGARBHAN S	II
88.	E17CSR095	SHANMUGARAJAN T	II
89.	E17CSR096	SHANTHINI R	II
90.	E17CSR097	SHOBANA PRIYA S	II
91.	E17CSR098	SHOBIYA J	II
92.	E17CSR099	SHRINIDHI B	II
93.	E17CSR100	SIVAKAMI S	II
94.	E17CSR101	SIVARANJANI I	II

ATTESTED

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95.	E17CSR102	SOCRATES A	II
96.	E17CSR103	SOWMIYA R	II
97.	E17CSR104	SRIMATHI P	II
98.	E17CSR105	SUBASRI K	II
99.	E17CSR106	SUBRAJA A	II
100.	E17CSR107	SUDHA M	II
101.	E17CSR108	SUGAPRIYA K	II
102.	E17CSR109	SUNDHARAVEL S	II
103.	E17CSR110	SURENDAR D	II
104.	E17CSR111	SURIYA PRABHA J	II
105.	E17CSR112	SURYA R	II
106.	E17CSR113	SUSHMITHA B	II
107.	E17CSR114	SUSUMITHA K	II
108.	E17CSR115	SWATHI R	II
109.	E17CSR116	THAHLEMA BANU S	II
110.	E17CSR117	VARATHA MANIKANDAN S	II
111.	E17CSR118	VEMBU E	II
112.	E17CSR119	VENGATRAMANAN E	II
113.	E17CSR120	VIGNESH A	II
114.	E17CSR122	VIJAYALAKSHMI N	II
115.	E17CSR123	VINODHINI R	II
116.	E17CSR124	VINOTHINI V	II
117.	E17CSR125	YAMUNA S	II
118.	E17CSR126	YOHAPRIYA B	II
119.	E17CSL301	ABINAYA K	II

Course Coordinators

HoD/CSE

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E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(Academic Year: 2018-2019)

VALUE ADDED COURSE ON "INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS"

STUDENT ATTENDANCE SHEET

Batch I

Date : 06.05.2019 – 11.05.2019

S.No	Register Number	Name of Student	06.05.19		07.05.19		08.05.19		09.05.19		10.05.19		11.05.19	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	E17CSR001	AANANI D	/	/	/	/	/	/	/	/	/	/	/	/
2.	E17CSR002	AARTHI K	/	/	/	/	/	/	/	/	/	/	/	/
3.	E17CSR004	ABINAYA K	/	/	/	/	/	/	/	/	/	/	/	/
4.	E17CSR005	ABINAYASRI G	/	/	/	/	/	/	/	/	/	/	/	/
5.	E17CSR006	ABINESHA K	/	/	/	/	/	/	/	/	/	/	/	/
6.	E17CSR007	ABISHEK J	/	/	/	/	/	/	/	/	/	/	/	/
7.	E17CSR008	AJITHA J	/	/	/	/	/	/	/	/	/	/	/	/
8.	E17CSR010	AKASHRAJ M	/	/	/	/	/	/	/	/	AB	AB	/	/
9.	E17CSR011	AMRITHA K	/	/	/	/	/	/	/	/	/	/	/	/
10.	E17CSR012	AMSAVARDHINI R	/	/	/	/	/	/	/	/	/	/	/	/
11.	E17CSR013	ARTHI P	/	/	/	/	/	/	/	/	/	/	/	/
12.	E17CSR014	ATCHAYA E	/	/	/	/	/	/	/	/	/	/	/	/

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HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College

13.	E17CSR015	BABIN B	/	/	/	/	/	/	/	/	/	/	/	/
14.	E17CSR017	BHARATH KUMAR R	/	/	/	/	/	/	/	/	/	/	/	/
15.	E17CSR018	BHAVADHARSHINI B	/	/	/	/	/	/	AB	AB	/	/	/	/
16.	E17CSR019	BHUVANESHWARI R	/	/	/	/	/	/	/	/	/	/	/	/
17.	E17CSR021	DEEPA P	/	/	AB	AB	/	/	/	/	/	/	/	/
18.	E17CSR022	DEEPIGA G	/	/	/	/	/	/	/	/	/	/	/	/
19.	E17CSR023	DEVADHARSHINI G	/	/	/	/	/	/	/	/	/	/	/	/
20.	E17CSR024	DEVIPRIYA R	/	/	/	/	/	/	/	/	/	/	/	/
21.	E17CSR025	DHAKSHNASUDHAN R	/	/	/	/	/	/	/	/	/	/	/	/
22.	E17CSR026	DHINESH K	/	/	/	/	/	/	/	/	/	/	/	/
23.	E17CSR027	DHIVYABHARATHI S	/	/	/	/	/	/	/	/	/	/	/	/
24.	E17CSR028	DINESH V	/	/	AB	AB	/	/	/	/	/	/	/	/
25.	E17CSR029	DIVYABHARATHI R	/	/	/	/	/	/	/	/	/	/	/	/
26.	E17CSR030	DURGADEVI R	/	/	/	/	/	/	/	/	/	/	/	/
27.	E17CSR032	ESWARI T	/	/	/	/	/	/	/	/	/	/	/	/
28.	E17CSR033	FAIROSEBANU A	/	/	/	/	/	/	/	/	/	/	/	/
29.	E17CSR034	FATHIMA BEEVI M	/	/	/	/	/	/	/	/	/	/	/	/
30.	E17CSR035	GANGADEVI T	/	/	/	/	/	/	/	/	/	/	/	/
31.	E17CSR036	[illegible]ATHRI S	/	/	/	/	/	/	/	/	/	/	/	/
32.	E17CSR037	GIRTHA A	/	/	/	/	/	/	/	/	/	/	/	/
33.	E17CSR038	HARIHARAN E	AB	AB	AB	AB	/	/	AB	AB	AB	AB	AB	AB

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34.	E17CSR039	HASSIM ASLAM S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
35.	E17CSR040	HEMA R	/	/	AB	AB	/	/	/	/	/	/	/	/	/	/	/
36.	E17CSR041	JAISURYA K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37.	E17CSR042	JAYADHARANI C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38.	E17CSR043	JEEVANANTHAM S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
39.	E17CSR044	JENITHA M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
40.	E17CSR045	JINSI S	/	/	/	/	/	/	AB	AB	/	/	/	/	/	/	/
41.	E17CSR046	KAYATHRI V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
42.	E17CSR047	KEERTHANA R	/	/	/	/	AB	AB	/	/	/	/	/	/	/	/	/
43.	E17CSR048	KEERTHIKA J	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
44.	E17CSR049	KIRUBAKARAN K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
45.	E17CSR050	KISHORE G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
46.	E17CSR051	KUMARAN R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
47.	E17CSR052	MADHURI D	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
48.	E17CSR053	MAHESWARI V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
49.	E17CSR055	MANOJKUMAR M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
50.	E17CSR056	MATHANRAJ C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
51.	E17CSR057	MEENAKSHI J	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
52.	E17CSR058	MEERA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
53.	E17CSR059	MOHAMED SALMAN FASITH S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
54.	E17CSR060	MOHAMED YUSUF M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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55.	E17CSR061	MONISHA P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
56.	E17CSR062	MURUGESWARI V	/	/	/	/	/	/	/	/	AB	AB	/	/	/	/	/	/
57.	E17CSR063	MUTHUKARTHIGA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
58.	E17CSR064	NANTHINI BHARATHI R	/	/	AB	AB	/	/	/	/	/	/	/	/	/	/	/	/
59.	E17CSR065	NIRMAL T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
60.	E17CSR066	NITHISHKUMAR I	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
		Total Present	59	59	55	55	59	59	57	57	57	57	59	59				
		Total Absent	01	01	05	05	01	01	03	03	03	03	01	01				
		Course Coordinator Signature																

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(Academic Year: 2018-2019)

VALUE ADDED COURSE ON "INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS"

STUDENT ATTENDANCE SHEET

Batch II

Date : 13.05.2019 – 18.05.2019

S.No	Register Number	Name of Student	13.05.19		14.05.19		15.05.19		16.05.19		17.05.19		18.05.19	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	E17CSR067	NIVEDHITHA D	/	/	/	/	/	/	/	/	/	/	/	/
2.	E17CSR068	PAVITHRA M P	/	/	/	/	/	/	/	/	/	/	/	/
3.	E17CSR069	POONTHAMIZH P	/	/	/	/	/	/	/	/	/	/	/	/
4.	E17CSR070	PRADEEPA A	/	/	AB	AB	/	/	/	/	/	/	/	/
5.	E17CSR071	PRAVINKUMAR M	/	/	/	/	/	/	/	/	/	/	/	/
6.	E17CSR072	PREETHA S	/	/	/	/	/	/	/	/	/	/	/	/
7.	E17CSR073	PREETHI V	/	/	/	/	/	/	/	/	AB	AB	/	/
8.	E17CSR074	PRINCE SUJA K	/	/	/	/	/	/	/	/	/	/	/	/
9.	E17CSR075	PRIYADHARSHINI J	/	/	/	/	/	/	/	/	/	/	/	/
10.	E17CSR076	PRIYADHARSHINI R	/	/	/	/	/	/	/	/	/	/	/	/
11.	E17CSR077	PRIYADHARSHINI V	/	/	/	/	/	/	/	/	/	/	/	/
12.	E17CSR078	PRIYANKA R	/	/	/	/	/	/	/	/	/	/	/	/
13.	E17CSR079	PUNITHA S	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB

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14.	E17CSR080	RAHUL R	/	/	/	/	/	/	/	/	/	/	/	/	/
15.	E17CSR081	RAJESHWARI M	/	/	/	/	/	/	/	/	/	/	/	/	/
16.	E17CSR082	RAM PRASATH R K	/	/	/	/	/	/	/	/	/	/	/	/	/
17.	E17CSR083	RANJANI DEVI T	/	/	/	/	/	/	/	/	/	/	/	/	/
18.	E17CSR084	RAVIKUMAR P	/	/	/	/	/	/	/	/	/	/	/	/	/
19.	E17CSR085	RAVINA R	/	/	/	/	/	/	/	/	/	/	/	/	/
20.	E17CSR086	SAMEERABANU M	/	/	/	/	/	/	/	/	/	/	/	/	/
21.	E17CSR087	SAMUVEL R	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB
22.	E17CSR089	SANTHOSH M	/	/	/	/	/	/	/	/	/	/	/	/	/
23.	E17CSR090	SATHISWARAN M	/	/	/	/	/	/	/	/	/	/	/	/	/
24.	E17CSR091	SATHYAPRIYA M	/	/	/	/	/	/	/	/	/	/	/	/	/
25.	E17CSR092	SELVAKUMARI R	/	/	/	/	/	/	/	/	/	/	/	/	/
26.	E17CSR093	SELVAMUTHUKUMARAN R	AB	AB	/	/	/	/	/	/	/	/	/	/	/
27.	E17CSR094	SHAGARBHAN S	/	/	/	/	/	/	/	/	/	/	/	/	/
28.	E17CSR095	SHANMUGARAJAN T	/	/	/	/	/	/	/	/	/	/	/	/	/
29.	E17CSR096	SHANTHINI R	/	/	/	/	/	/	/	/	/	/	/	/	/
30.	E17CSR097	SHOBANA PRIYA S	/	/	/	/	/	/	/	/	/	/	/	/	/
31.	E17CSR098	SHOBIYA J	/	/	/	/	/	/	/	/	AB	AB	/	/	/
32.	E17CSR099	SHRINIDHI B	/	/	/	/	/	/	/	/	/	/	/	/	/
33.	E17CSR100	SIVAKAMI S	/	/	/	/	/	/	/	/	/	/	/	/	/
34.	E17CSR101	SIVARANJANI I	/	/	/	/	/	/	/	/	/	/	/	/	/

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35.	E17CSR102	SOCRATES A	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB
36.	E17CSR103	SOWMIYA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37.	E17CSR104	SRIMATHI P	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38.	E17CSR105	SUBASRI K	/	/	/	/	/	/	/	/	/	/	/	/	/	/
39.	E17CSR106	SUBRAJA A	/	/	AB	AB	/	/	/	/	/	/	/	/	/	/
40.	E17CSR107	SUDHA M	/	/	/	/	/	/	/	/	/	/	/	/	/	/
41.	E17CSR108	SUGAPRIYA K	/	/	/	/	/	/	/	/	/	/	/	/	/	/
42.	E17CSR109	SUNDHARAVEL S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
43.	E17CSR110	SURENDAR D	/	/	/	/	/	/	/	/	/	/	/	/	/	/
44.	E17CSR111	SURIYA PRABHA J	/	/	/	/	/	/	/	/	/	/	/	/	/	/
45.	E17CSR112	SURYA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/
46.	E17CSR113	SUSHMITHA B	/	/	/	/	/	/	/	/	/	/	/	/	/	/
47.	E17CSR114	SUSUMITHA K	/	/	/	/	/	/	/	/	AB	AB	/	/	/	/
48.	E17CSR115	SWATHI R	/	/	/	/	/	/	/	/	/	/	/	/	/	/
49.	E17CSR116	THAHLEMA BANU S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
50.	E17CSR117	VARATHA MANIKANDAN S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
51.	E17CSR118	VEMBU E	/	/	/	/	/	/	/	/	/	/	/	/	/	/
52.	E17CSR119	VENGATRAMANAN E	/	/	/	/	/	/	/	/	/	/	/	/	/	/
53.	E17CSR120	VIGNESH A	/	/	/	/	/	/	/	/	/	/	/	/	/	/
54.	E17CSR122	VIJAYALAKSHMI N	/	/	/	/	/	/	/	/	/	/	/	/	/	/
55.	E17CSR123	VINODHINI R	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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56.	E17CSR124	VINOTHINI V	/	/	/	/	/	/	/	/	/	/	/	/	
57.	E17CSR125	YAMUNA S	/	/	/	/	/	/	/	/	AB	AB	/	/	
58.	E17CSR126	YOHAPRIYA B	/	/	/	/	/	/	/	/	/	/	/	/	
59.	E17CSL301	ABINAYA K	/	/	/	/	/	/	/	/	/	/	/	/	
		Total Present	55	55	54	54	56	56	56	56	52	52	56	56	
		Total Absent	4	4	5	5	3	3	03	03	07	07	03	03	
		Course Coordinator Signature													

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COURSE MATERIAL

Module I – WIRELESS COMMUNICATIONS AND DIVERSITY

Introduction to 3G/4G standards:-

- **Wireless communication systems have become an integral part of our lives, especially during the last decade.**
- **3G stands for third generation wireless communication systems**
- **4G stands for fourth generation wireless communication systems**

2G WIRELESS SYSTEMS AND STANDARDS:-

GENERATION	STANDARD	DATARATE
2G	GSM=Global Systems for Mobile Communication	10kbps
2G	CDMA= Code Division for Multiple Access	10kbps
2.5G	GPRS= General PacketRadio Service	~50kbps
2.5G for GSM Evolution	EDGE=Edge Standard or Enhanced Data	~200kbps

- The GSM standard has a basic voice data rate of 10kbps.This is used for voice call that you place from one GSM mobile phone to another GSM mobile phone. This is operated in narrow band spectrum.
- The second standard CDMA was developed to enable internet access or is technically known as accessing best effort packet data, over cellular networks. This is operated in wide band spectrum.
- The GSM and CDMA standards belong to 2G.
- Among the two 2.5G standards, the first is GPRS which is used to access packet data or especially to access internet over your GSM mobile phones.
- Another competing 2.5G or sometimes also known as a 2.75G standard is EDGE which has a data rate approximately 200 kbps.
- So this is the family that is GSM,CDMA,GPRS,EDGE these are the family of 2.5G,2.2G,2.5G wireless communication standards ,enable to place voice calls from mobile to mobile ,also some basic internet access packet data access over cellular networks.

3G WIRELESS SYSTEMS AND STANDARDS:-

GENERATION	STANDARD	DATARATE
3G	WCDMA = Wideband Code Division Multiple Access/ UMTS= Universal Mobile Telecommunication standards	384Kbps
3G	CDMA 2000	384Kbps
3.5G	HSDPA=high speed downlink packet access/ HSUPA=high speed uplink packet access	5-30Mbps
3.5G	1XEVDO=evolution data optimized rev a,b,c	5-30Mbps

- The 3G standard WCDMA is also known as UMTS, which has higher data rates compared to GSM and GPRS, which are data rates around 10kbps for voice call,to 50Kbps for packet or internet access.
- The CDMA 2000 is another 3G standard which has a data rate of 384Kbps. In this standard, 2000 is the year roughly in which it has introduced.
- The 3.5G standard is HSDPA/HSUPA .These are two directions in which communication can take place, one is from the base station to the mobile that is known as downlink , the other is the mobile to the base station that is known as the uplink.
- The another 3.5G standard is 1XEVDO, where EVDO stands for evolution data optimized.

4G WIRELESS SYSTEMS AND STANDARDS:-

GENERATION	STANDARD	DATARATE
4G	LTE=Long Term Evolution	100-200Mbps
4G	WiMAX=World wide Interoperability For Microwave Access	100-200Mbps

These standards have more bandwidth than the previous generation standards
These two standards are most popular standards, currently in development and deployment in different countries in the world.

LIST OF GENERATIONS WITH DATA RATES AND USES OR APPLICATION:-

GENERATION	DATARATE	APPLICATION/USE
2G,2.5G	10-100Kbps	voice+ data
3G,3.5G	30Kbps-30Mbps	voice+ data+ video calling and Conferences
4G	100Mbps-200Mbps	online gaming, HDTV

- So, as the result of the increasing demand for higher bandwidth applications has led to the progressive development of 3G,3.5G and 4G wireless communication systems.

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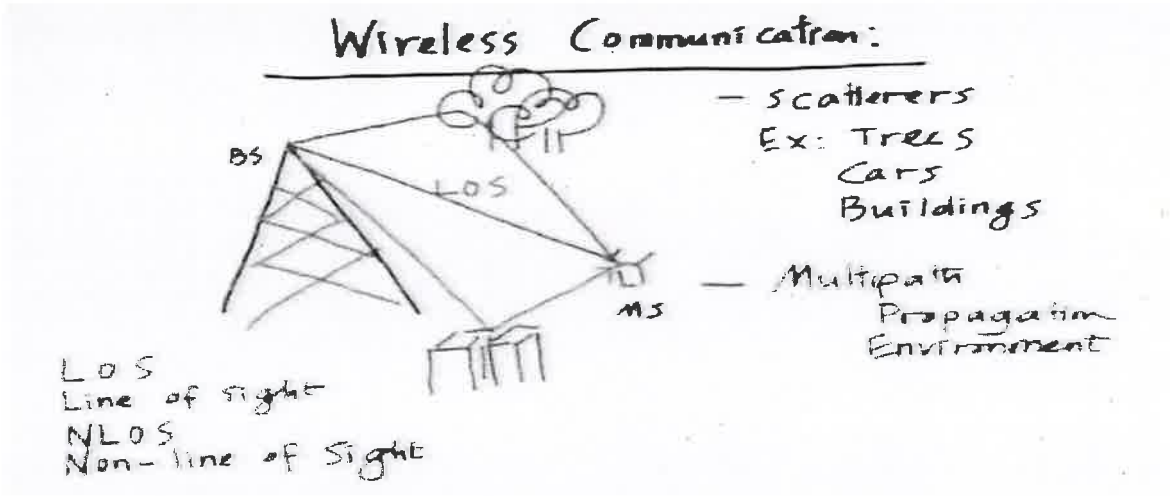
WIRELESS COMMUNICATION:



- A wireless communication systemtypically containsa base stationthat is transmitting to a mobile terminal or mobile phones or that is technically also known as a mobile station.
- Base station, that is mounted typically at a very high at a height on a tower and a mobile station can be seen in figure.
- In a wireless communication system, that the radio environment is open, in addition to the direct propagation, that is the direct line of sight (LOS), propagation between the base station and the mobile station.
- There are also several reflected components, that arise in the environment namely some scatter in the environment, such as trees, buildings etc.. and there might also be other scatters such as moving and which also scatter.

- The wireless communication environment is very different than the wire line communication environment, because it doesn't have only the direct path between the base station and mobile station, but also have many scattered or reflected paths and these objects which scatter the wireless signal, are known as scatterers.
- These are typically objects such as trees,cars,vehicles,large buildings.In rural scenario large mountains,hill rocks and so on are the scatterers.
- So these are the scatterers, which implies at the receiver not only have a single component, but have multiple components,that you have multiple signal ,arriving at the mobile station, through not just a single path,but multiple paths and hence this is known as a "multipath propagation environment", because unlike wire line channels in a wireless system, there is a direct path, and there are also many scatter paths, and there are multiple paths.
- The direct path is known as the LOS or line of sight and the scatter paths are known as NLOS or non line of sight components.
- In such environment, each wave comes through a different distance is subject to an attenuation. Attenuation because of free space losses and also because the distance is different the delay is different which means the phase that it arrives with at the mobile station is different.

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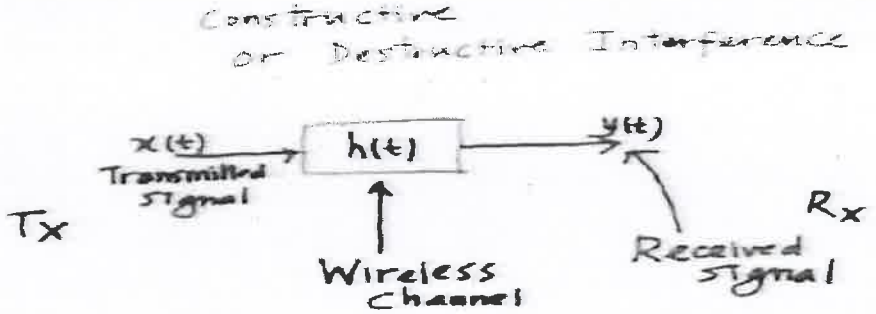
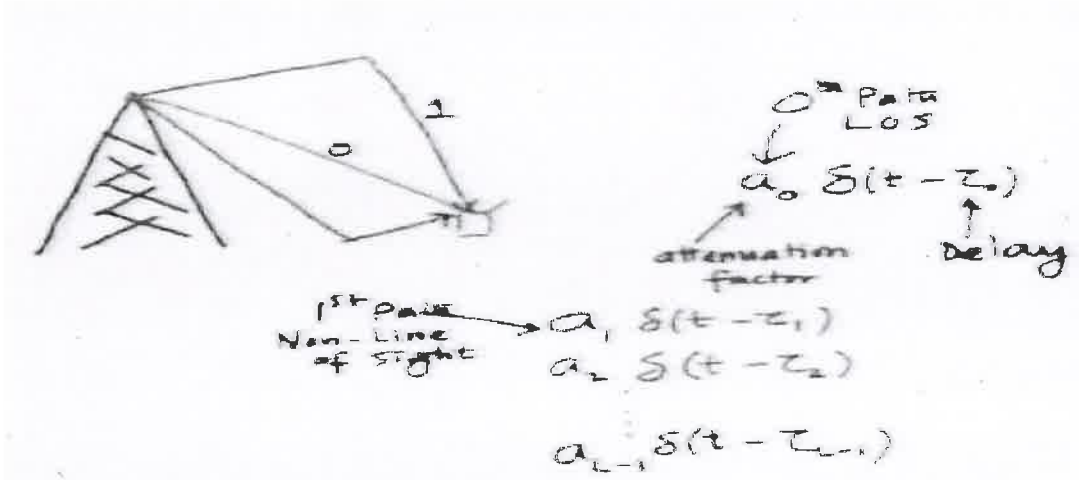
- The signalsdepending on the different delayshave a phase factor and depending on the delays,they can either add constructively to produce constructive interference that is increase in the amplitude of the net signal, or at times they can also add destructively, that is they can cancel out each other,to produce destructive interference.



- Wireless communications is multipath components add with different phase factors,because of the delays and different attenuations arising, because of free space losses and scattering, and hence it results in constructive or destructive ,which means if it is constructive interference its good, because the signal strength increase, if is destructive interference strength decreases or signal level goes down
- Wireless communication environment, is an adverse environment , because multipath propagation , or rather multipath interference then the signal level is low, in which implies that there is no reception of signals
- In the above figure,h(t) is the impulse response ,x(t) is the input signal transmitted by the base station(t) is the output signal that is received by the mobile station .The impulse response of the wireless channel is h(t)

  Y(t)=x(t)*h(t)

- The basic wireless system is redrawn, which contains LOS path indicated by 0 and NLOS path indicated by 1.The system contains direct path and several scatter paths between the base station and the mobile station.



e such path is direct path indicated by 0^{th} path having the attenuation factor (a_0) and ay(τ_0).This is also known as direct line of sight path and delay τ_1 ,that it has an impulse ponse $a1\delta(t-\tau_1)$.This is also known as non line of site and similarly ,we can have a second h with attenuation factor a_2 and delay τ_2 and so on we can have upto L-1 paths with enuation factor L-1 and delay $\tau(L-1)$

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VALUE ADDED COURSE ON
"INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS"

FROM 06/05/2019 TO 11/05/2019

Assessment Questions – SET 1

Multiple Choice Questions (20*1 = 20)

1. What is wireless communication?
a) Sending data from one location to with the use of physical medium
b) Sending data from one location to another without the use of physical medium
c) Sending data from one location to another without the use of virtual medium
d) None of the mentioned

2. Which of the following is a type of wireless communication?
a) LAN
b) WAN
c) PAN
d) All of the mentioned

3. Spacc diversity s also known as _____
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b) Antenna diversity
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c) Delta frequency
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Nagapattinam (Dt) Tamil Nadu.

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c) Microwave line of sight radio links
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b) Level crossing rate (LCR)
c) Power density
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b) IS-136
c) IS-95
d) IS-76

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a) 1.25 MHz
b) 1.25 kHz
c) 200 kHz
d) 125 kHz

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13. _____ also known as impulse or zero-carrier radio technology.
a) Ultra wideband technology
b) Femtocell technology
c) Multicasting
d) Multiplexing

14. DSC-UWB uses _____
a) Pulse width modulation
b) Pulse code modulation
c) Pulse position modulation
d) Direct sequence modulation

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a) Many input many output
b) Multiple input multiple output
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c) Refraction
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a) wireless maximum communication
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c) worldwide international standard for microwave access
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a) 1.2288 Mcps
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19. How is HSCSD different from GPRS?
a) Infrastructure
b) Multiple Access Scheme
c) Modulation technique
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20. What type of handovers is supported by LTE?
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Answers:

1	2	3	4	5	6	7	8	9	10
b	d	b	d	b	a	a	b	c	a
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
b	c	a	d	b	b	b	b	d	a

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DEPARTMENT OF CSE

VALUE ADDED COURSE ON
"INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS"

FROM 13/05/2019 TO 18/05/2019

Assessment Questions – SET 2

Multiple Choice Questions (20*1 = 20)

1. Diversity decisions are made by _____
a) Receiver
b) Transmitter
c) Channel
d) Adaptive algorithms

2. Large scale fading can be mitigated with the help of _____
a) Modulation
b) Demodulation
c) Macroscopic diversity technique
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c) Doppler amplitude
d) Doppler shift

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b) Dual
c) Redundant
d) Wide beam

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25

7. Which of the following is not a channel parameter?
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b) Rms delay spread
c) Doppler spread
d) Bandwidth

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b) Increase of capacity
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9. What does the DC subcarrier indicate?
a) Identity of the cell
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a) Connection of mobile to base stations
b) Connection of mobile to PSTN
c) Connection of base station to PSTN
d) Connection of base station to MSC

13. In MIMO, which factor has the greatest influence on data rates?
a) The size of antenna
b) The height of the antenna
c) The number of transmit antennas
d) The area of receive antennas

14. _____ is an additional open-loop MIMO technique considered by the WiMAX vendors.
a) STTD
b) SM
c) Collaborative Uplink MIMO
d) MU-MIMO

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b) Lower price
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16. Which of the following is a drawback of UWB technology?
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c) Small spectrum
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a) ITU
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18. Which of the following memory device stores information such as subscriber's identification number in GSM?
a) Register
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19. What is the full form of UMTS?
a) Universal Mobile Telephone System
b) Ubiquitous Mobile Telephone System
c) Ubiquitous Mobile Telemetry System
d) Universal Machine Telemedicine System

20. Which organization is responsible for developing LTE standards?
a) UMTS
b) 3GPP
c) 3GPP2
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Answers:

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VALUE ADDED COURSE ON
"INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS"

FROM 06/05/2019 TO 11/05/2019

Assessment Questions – SET 1

20

Multiple Choice Questions (20*1 = 20)

1. What is wireless communication?
a) Sending data from one location to with the use of physical medium
b) Sending data from one location to another without the use of physical medium
c) Sending data from one location to another without the use of virtual medium
d) None of the mentioned

2. Which of the following is a type of wireless communication?
a) LAN
b) WAN
c) PAN
d) All of the mentioned

3. Space diversity s also known as _____
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b) Antenna diversity
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VALUE ADDED COURSE ON
"INTRODUCTION TO 3G & 4G WIRELESS COMMUNICATIONS"

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EGS Pillay Engineering College, Nagapattinam			
Department of CSE			
Academic Year : 2018-2019			
Value added course on Introduction to 3G & 4G Wireless Communications			
Batch: 2017-2021			
Mark Sheet			
S. No	**Register Number**	**Name**	**Marks**
1.	E17CSR001	AANANI D	20
2.	E17CSR002	AARTHI K	18
3.	E17CSR004	ABINAYA K	18
4.	E17CSR005	ABINAYASRI G	16
5.	E17CSR006	ABINESHA K	15
6.	E17CSR007	ABISHEK J	17
7.	E17CSR008	AJITHA J	16
8.	E17CSR010	AKASHRAJ M	15
9.	E17CSR011	AMRITHA K	18
10.	E17CSR012	AMSAVARDHINI R	16
11.	E17CSR013	ARTHI P	18
12.	E17CSR014	ATCHAYA E	17
13.	E17CSR015	BABIN B	16
14.	E17CSR017	BHARATH KUMAR R	15
15.	E17CSR018	BHAVADHARSHINI B	18
16.	E17CSR019	BHUVANESHWARI R	17
17.	E17CSR021	DEEPA P	20
18.	E17CSR022	DEEPIGA G	16
19.	E17CSR023	DEVADHARSHINI G	18
20.	E17CSR024	DEVIPRIYA R	19
21.	E17CSR025	DHAKSHNASUDHAN R	15
22.	E17CSR026	DHINESH K	17
23.	E17CSR027	DHIVYABHARATHI S	15
24.	E17CSR028	DINESH V	17
25.	E17CSR029	DIVYABHARATHI R	19
26.	E17CSR030	DURGADEVI R	18
27.	E17CSR032	ESWARI T	17
28.	E17CSR033	FAIROSEBANU A	20
29.	E17CSR034	FATHIMA BEEVI M	15
30.	E17CSR035	GANGADEVI T	16
31.	E17CSR036	GAYATHRI S	20
32.	E17CSR037	GEETHA A	19
33.	E17CSR038	HARIHARAN E	AB
34.	E17CSR039	HASSIM ASLAM S	18
35.	E17CSR040	HEMA R	19
36.	E17CSR041	JAISURYA K	16

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37.	E17CSR042	JAYADHARANI C	19
38.	E17CSR043	JEEVANANTHAM S	17
39.	E17CSR044	JENITHA M	20
40.	E17CSR045	JINSI S	19
41.	E17CSR046	KAYATHRI V	19
42.	E17CSR047	KEERTHANA R	15
43.	E17CSR048	KEERTHIKA J	18
44.	E17CSR049	KIRUBAKARAN K	16
45.	E17CSR050	KISHORE G	15
46.	E17CSR051	KUMARAN R	18
47.	E17CSR052	MADHURI D	15
48.	E17CSR053	MAHESWARI V	17
49.	E17CSR055	MANOJKUMAR M	19
50.	E17CSR056	MATHANRAJ C	18
51.	E17CSR057	MEENAKSHI J	17
52.	E17CSR058	MEERA R	18
53.	E17CSR059	MOHAMED SALMAN FASITH S	18
54.	E17CSR060	MOHAMED YUSUF M	19
55.	E17CSR061	MONISHA P	18
56.	E17CSR062	MURUGESWARI V	19
57.	E17CSR063	MUTHUKARTHIGA S	15
58.	E17CSR064	NANTHINI BHARATHI R	19
59.	E17CSR065	NIRMAL T	17
60.	E17CSR066	NITHISHKUMAR I	18
61.	E17CSR067	NIVEDHITHA D	16
62.	E17CSR068	PAVITHRA M P	19
63.	E17CSR069	POONTHAMIZH P	16
64.	E17CSR070	PRADEEPA A	17
65.	E17CSR071	PRAVINKUMAR M	18
66.	E17CSR072	PREETHA S	15
67.	E17CSR073	PREETHI V	17
68.	E17CSR074	PRINCE SUJA K	16
69.	E17CSR075	PRIYADHARSHINI J	15
70.	E17CSR076	PRIYADHARSHINI R	18
71.	E17CSR077	PRIYADHARSHINI V	15
72.	E17CSR078	PRIYANKA R	17
73.	E17CSR079	PUNITHA S	19
74.	E17CSR080	RAHUL R	AB
75.	E17CSR081	RAJESHWARI M	18
76.	E17CSR082	RAM PRASATH R K	16
77.	E17CSR083	RANJANI DEVI T	17
78.	E17CSR084	RAVIKUMAR P	17
79.	E17CSR085	RAVINA R	15
80.	E17CSR086	SAMEERABANU M	16

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Nag[illegible] Tamil Nadu.

81.	E17CSR087	SAMUVEL R	AB
82.	E17CSR089	SANTHOSH M	19
83.	E17CSR090	SATHISWARAN M	19
84.	E17CSR091	SATHYAPRIYA M	18
85.	E17CSR092	SELVAKUMARI R	16
86.	E17CSR093	SELVAMUTHUKUMARAN R	19
87.	E17CSR094	SHAGARBHAN S	16
88.	E17CSR095	SHANMUGARAJAN T	18
89.	E17CSR096	SHANTHINI R	17
90.	E17CSR097	SHOBANA PRIYA S	16
91.	E17CSR098	SHOBIYA J	14
92.	E17CSR099	SHRINIDHI B	18
93.	E17CSR100	SIVAKAMI S	19
94.	E17CSR101	SIVARANJANI I	15
95.	E17CSR102	SOCRATES A	AB
96.	E17CSR103	SOWMIYA R	15
97.	E17CSR104	SRIMATHI P	17
98.	E17CSR105	SUBASRI K	19
99.	E17CSR106	SUBRAJA A	17
100.	E17CSR107	SUDHA M	17
101.	E17CSR108	SUGAPRIYA K	18
102.	E17CSR109	SUNDHARAVEL S	19
103.	E17CSR110	SURENDAR D	18
104.	E17CSR111	SURIYA PRABHA J	18
105.	E17CSR112	SURYA R	15
106.	E17CSR113	SUSHMITHA B	16
107.	E17CSR114	SUSUMITHA K	19
108.	E17CSR115	SWATHI R	16
109.	E17CSR116	THAHLEMA BANU S	18
110.	E17CSR117	VARATHA MANIKANDAN S	19
111.	E17CSR118	VEMBU E	16
112.	E17CSR119	VENGATRAMANAN E	15
113.	E17CSR120	VIGNESH A	16
114.	E17CSR122	VIJAYALAKSHMI N	19
115.	E17CSR123	VINODHINI R	17
116.	E17CSR124	VINOTHINI V	18
117.	E17CSR125	YAMUNA S	16
118.	E17CSR126	YOHAPRIYA B	14
119.	E17CSL301	ABINAYA K	15

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HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Value Added Course on "Introduction to 3G & 4G Wireless Communications"

Impact analysis report

Batch: 2017-2021

S.NO	REGISTER No	STUDENT NAME	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1.	E17CSR001	AANANI D	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.	E17CSR002	AARTHI K	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
3.	E17CSR004	ABINAYA K	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
4.	E17CSR005	ABINAYASRI G	1	1	1	1	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1	0
5.	E17CSR006	ABINESHA K	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1	1	0	1	1
6.	E17CSR007	ABISHEK J	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1
7.	E17CSR008	AJITHA J	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0
8.	E17CSR010	AKASHRAJ M	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	0	0	1	1
9.	E17CSR011	AMRITHA K	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1
10.	E17CSR012	AMSAVARDHINI R	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0
11.	E17CSR013	ARTHI P	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1
12.	E17CSR014	ATCHAYA E	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1
13.	E17CSR015	BABIN B	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	0
14.	E17CSR017	BHARATH KUMAR R	1	1	1	0	1	1	1	0	1	0	1	1	1	1	0	1	1	1	1	0
15.	E17CSR018	BHAVADHARSHINI B	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
16.	E17CSR019	BHUVANESHWARI R	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1
17.	E17CSR021	DEEPA P	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.	E17CSR022	DEEPIGA G	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0
19.	E17CSR023	DEVADHARSHINI G	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1
20.	E17CSR024	DEVIPRIYA R	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
21.	E17CSR025	DHAKSHNASUDHAN R	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1
22.	E17CSR026	DHINESH K	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1
23.	E17CSR027	DHIVYABHARATHI S	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	0	0	1	1
24.	E17CSR028	DINESH V	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1

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25.	E17CSR029	DIVYABHARATHI R	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
26.	E17CSR030	DURGADEVI R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1
27.	E17CSR032	ESWARI T	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1
28.	E17CSR033	FAIROSEBANU A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.	E17CSR034	FATHIMA BEEVI M	1	0	1	0	1	1	1	1	1	0	0	1	1	1	0	1	1	1	1	1
30.	E17CSR035	GANGADEVI T	0	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	0	1
31.	E17CSR036	GAYATHRI S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.	E17CSR037	GEETHA A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
33.	E17CSR038	HARIHARAN E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.	E17CSR039	HASSIM ASLAM S	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
35.	E17CSR040	HEMA R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
36.	E17CSR041	JAISURYA K	1	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	0	1
37.	E17CSR042	JAYADHARAN I C	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
38.	E17CSR043	JEEVANANTHAM S	1	0	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
39.	E17CSR044	JENITHA M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.	E17CSR045	JINSI S	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
41.	E17CSR046	KAYATHRI V	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
42.	E17CSR047	KEERTHANA R	1	1	0	1	1	1	1	0	1	1	0	1	1	0	1	1	0	1	1	1
43.	E17CSR048	KEERTHIKA J	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
44.	E17CSR049	KIRUBAKARAN K	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0	1	0	1	1	1
45.	E17CSR050	KISHORE G	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	0	1	0	1
46.	E17CSR051	KUMARAN R	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1
47.	E17CSR052	MADHURI D	1	0	1	1	1	0	1	1	0	1	0	1	1	1	1	1	1	0	1	1	1
48.	E17CSR053	MAHESWARI V	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1
49.	E17CSR055	MANIKUMAR M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
50.	E17CSR056	MATHANRAJ	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
51.	E17CSR057	MEENAKSHI J	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	1	1	1	1
52.	E17CSR058	MEERA R	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1

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53.	E17CSR059	MOHAMED SALMAN FASITH S	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
54.	E17CSR060	MOHAMED YUSUF M	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
55.	E17CSR061	MONISHA P	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0
56.	E17CSR062	MURUGESWARI V	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
57.	E17CSR063	MUTHUKARTHIGA S	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1
58.	E17CSR064	NANTHINI BHARATHI R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
59.	E17CSR065	NIRMAL T	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1
60.	E17CSR066	NITHISHKUMAR I	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1
61.	E17CSR067	NIVEDHITHA D	1	1	1	0	1	1	1	1	0	1	1	1	1	1	0	0	1	1	1	1
62.	E17CSR068	PAVITHRA M P	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.	E17CSR069	POONTHAMIZH P	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1
64.	E17CSR070	PRADEEPA A	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1
65.	E17CSR071	PRAVINKUMAR M	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1
66.	E17CSR072	PREETHA S	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1
67.	E17CSR073	PREETHI V	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
68.	E17CSR074	PRINCE SUJA K	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	1
69.	E17CSR075	PRIYADHARSHINI J	1	1	1	1	0	1	1	0	1	0	1	1	1	0	1	1	1	1	0	1
70.	E17CSR076	PRIYADHARSHINI R	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
71.	E17CSR077	PRIYADHARSHINI V	1	1	0	1	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	0
72.	E17CSR078	PRIYANKA R	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1
73.	E17CSR079	PUNITHA S	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.	E17CSR080	RAHUL R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75.	E17CSR081	RAJESHWARI M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0
76.	E17CSR082	RAM [illegible]	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	0
77.	E17CSR083	RANJANI DEVI	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	0
78.	[illegible]	[illegible] R	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1

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79.	E17CSR085	RAVINA R	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1
80.	E17CSR086	SAMEERABANU M	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1
81.	E17CSR087	SAMUVEL R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82.	E17CSR089	SANTHOSH M	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
83.	E17CSR090	SATHISWARAN M	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
84.	E17CSR091	SATHYAPRIYA M	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
85.	E17CSR092	SELVAKUMAR I R	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0
86.	E17CSR093	SELVAMUTHU KUMARAN R	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
87.	E17CSR094	SHAGARBHAN S	1	1	1	1	0	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1
88.	E17CSR095	SHANMUGARAJAN T	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
89.	E17CSR096	SHANTHINI R	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1
90.	E17CSR097	SHOBANA PRIYA S	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1
91.	E17CSR098	SHOBIYA J	0	1	1	0	1	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1
92.	E17CSR099	SHRINIDHI B	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1
93.	E17CSR100	SIVAKAMI S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
94.	E17CSR101	SIVARANJANI I	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0
95.	E17CSR102	SOCRATES A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96.	E17CSR103	SOWMIYA R	1	1	0	1	1	1	0	0	1	1	1	0	1	0	1	1	1	1	1	1
97.	E17CSR104	SRIMATHI P	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
98.	E17CSR105	SUBASRI K	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
99.	E17CSR106	SUBRAJA A	0	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1
100.	E17CSR107	SUDHA M	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
101.	E17CSR108	SUGAPRIYA K	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0
102.	E17CSR109	SUNDHARAVEL S	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
103.	E17CSR110	SURENDAR D	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0
104.	E17CSR111	SURYA PRABHA J	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1
105.	E17CSR112	SURYA R	1	1	0	0	1	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1
106.	E17CSR113	SUSMITHA B	1	1	1	0	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1
107.	E17CSR114	SUSMITHA K	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1

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108.	E17CSR115	SWATHI R	0	1	0	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1
109.	E17CSR116	THAHLEMA BANU S	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1
110.	E17CSR117	VARATHA MANIKANDA N S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
111.	E17CSR118	VEMBU E	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0
112.	E17CSR119	VENGATRAM ANAN E	1	1	1	0	1	0	1	0	1	1	1	1	1	1	0	1	1	1	0	1
113.	E17CSR120	VIGNESH A	1	1	0	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1
114.	E17CSR122	VIJAYALAKSH MI N	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
115.	E17CSR123	VINODHINI R	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
116.	E17CSR124	VINOTHINI V	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
117.	E17CSR125	YAMUNA S	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	0
118.	E17CSR126	YOHAPRIYA B	1	0	0	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	1	0
119.	E17CSL301	ABINAYA K	1	1	0	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	1	0
		TOTAL	103	103	98	90	94	108	108	97	97	95	94	103	99	104	95	102	91	104	97	93
		ATTAINMENT	89.6	89.6	85.2	78.3	81.7	93.9	93.9	84.3	84.3	82.6	81.7	89.6	86.1	90.4	82.6	88.7	79.1	90.4	84.3	80.9
		LEVEL OF ATTAINMENT	2 (M)	2(M)	2(M)	1(L)	2(M)	3(S)	3(S)	2(M)	2(M)	2(M)	2(M)	2(M)	2(M)	3(S)	2(M)	2 (M)	1(L)	3 (S)	2(M)	2(M)

Attainment level calculation	
>=70%-79%	1 (L)
>=80%-89%	2 (M)
>=90%	3 (S)

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Mapping of Course Outcomes Vs Program Outcomes

CO Number	Competency	Cognitive level
CO1	Understand the basic concepts of wireless communications.	Understand
CO2	Apply the cellular concepts to evaluate the signal reception performance in a cellular network.	Apply
CO3	Analyze Multiuser Systems, CDMA, WCDMA network planning and OFDM Concepts.	Analyze
CO4	Design wireless communication systems with key 3G and 4G technologies.	Apply
CO5	Develop technical and listening skills for effective communication.	Apply

CO to PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	-	2	3	-	2	-	2	3	2	3
CO2	3	-	-	-	2	-	2	2	2	2	1	-
CO3	3	3	-	2	3	-	2	-	2	3	2	3
CO4	3	-	-	2	3	-	2	-	2	2	2	3
CO5	3	-	-	-	3	-	3	-	2	3	2	3

CO to PSO Mapping

Course Outcome	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	3	3
CO4	2	2
CO5	2	3

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E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous)

NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Academic Year : 2018-2019 **Batch:** 2017

Name of the Value Added Course: Introduction to 3G & 4G Wireless Communications **Semester:** N

Student Name: T. Eswari

Register Number: E1TCSR032

Staff Handling: Mr. S. Praveenkumar

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course Content	✓				
2	Skill Development	✓				
3	Motivation	✓				
4	Regularity and Punctuality of teacher	✓				
5	Coverage of syllabus	✓				
6	Interaction	✓				
7	Individual attention		✓			
8	Outcome	✓				
9	Other suggestions	This Course is very useful & Knowledgeable.				

T. Eswari

Signature of the student

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E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous)

NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Academic Year : 2018 – 2019 **Batch:** 2017

Name of the Value Added Course: Introduction to 3G&4G Wireless Communication **Semester:** IV

Student Name: K. Abinaya

Register Number: 811CSL3011

Staff Handling: M. Rajakumaran

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course Content	✓				
2	Skill Development	✓				
3	Motivation		✓			
4	Regularity and Punctuality of teacher	✓				
5	Coverage of syllabus	✓				
6	Interaction		✓			
7	Individual attention		✓			
8	Outcome	✓				
9	Other suggestions	Very Useful Course				

K. Abinaya

Signature of the student

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM
DEPARTMENT OF CSE

COURSE SUMMARY REPORT

1. Title: Inroduction to 3G & 4G Wireless Communications
2. Name of Speaker:
    1. Mr.S.Praveenkumar
    2. Mr.M.Rajakumaran
3. Speaker Details:
    1. Assistant Professor, CSE Department, EGSPEC.
    2. Assistant Professor, CSE Department, EGSPEC.
4. Date of speaker's presentation:
    06.05.2019 – 11.05.2019 & 13.05.2019 – 18.05.2019
5. Duration : 36 Hours
6. Beneficiary Details:
    UG – II CSE Students
7. Coordinators:
    Dr. N.Murali, Associate Professor, CSE Department, EGSPEC

More about this Course:

The value added course Introduction to 3G & 4G wireless communications provide students with an overview of the concepts wireless communication and its advancements. The telecommunication industry witnessed a boom in packet based data application services providing high quality of service for mobile applications in a cost effective manner. to satisfy the ever increasing demand for higher throughput and data rates, wireless communication systems need to operate in wider bandwidths 3G support very high data rate transmission in its new LTE advanced standards. A 4G system must provide capabilities defined by ITU in IMT Advanced.

After completing this course, you will be able to: 1. Compare how the telephone system works (that is, peer-to-peer networks) with how media delivery works (that is, broadcast/multicast networks). 2. Explain the tradeoffs between circuit switched networks (that is, dedicated resources) and packet switched networks (that is, shared resources). 3. Tell interesting stories about key innovations that transformed the communications, entertainment and consumer electronics industries. 4. Explain how email, YouTube, SMS, etc. work. 5. Find resources for those wishing to do more of a "deep-dive" into the above topics.

ATTESTED

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Nagapattinam (Dt) Tamil Nadu.

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)
OLD NAGORE ROAD, THETHI, NAGAPATTINAM – 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

This is to certify that

Mr./Ms. Fairose Banu A

has successfully completed the value added course on **"Introduction to 3G & 4G Wireless Communications"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from **06/05/2019 to 11/05/2019.**

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt.) Tamil Nadu.

COORDINATORS	HOD / CSE	PRINCIPAL
DR.N.MURALI	DR.M.CHINNADURAI	DR.S.RAMABALAN

46

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)
OLD NAGORE ROAD, THETHI, NAGAPATTINAM 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

This is to certify that

Mr./Ms. Jenitha M

has successfully completed the value added course on **"Introduction to 3G & 4G Wireless Communications"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from **06/05/2019 to 11/05/2019.**

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu

COORDINATORS	HOD / CSE	PRINCIPAL
DR.N.MURALI	DR.M.CHINNADURAI	DR.S.RAMABALAN

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
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OLD NAGORE ROAD, THETHI, NAGAPATTINAM – 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

This is to certify that

Mr./Ms. Surendar D

has successfully completed the value added course on **"Introduction to 3G & 4G Wireless Communications"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from **13/05/2019 to 18/05/2019.**

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

COORDINATORS	HOD / CSE	PRINCIPAL
DR.N.MURALI	DR.M.CHINNADURAI	DR.S.RAMABALAN

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)
OLD NAGORE ROAD, THETHI, NAGAPATTINAM – 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

This is to certify that

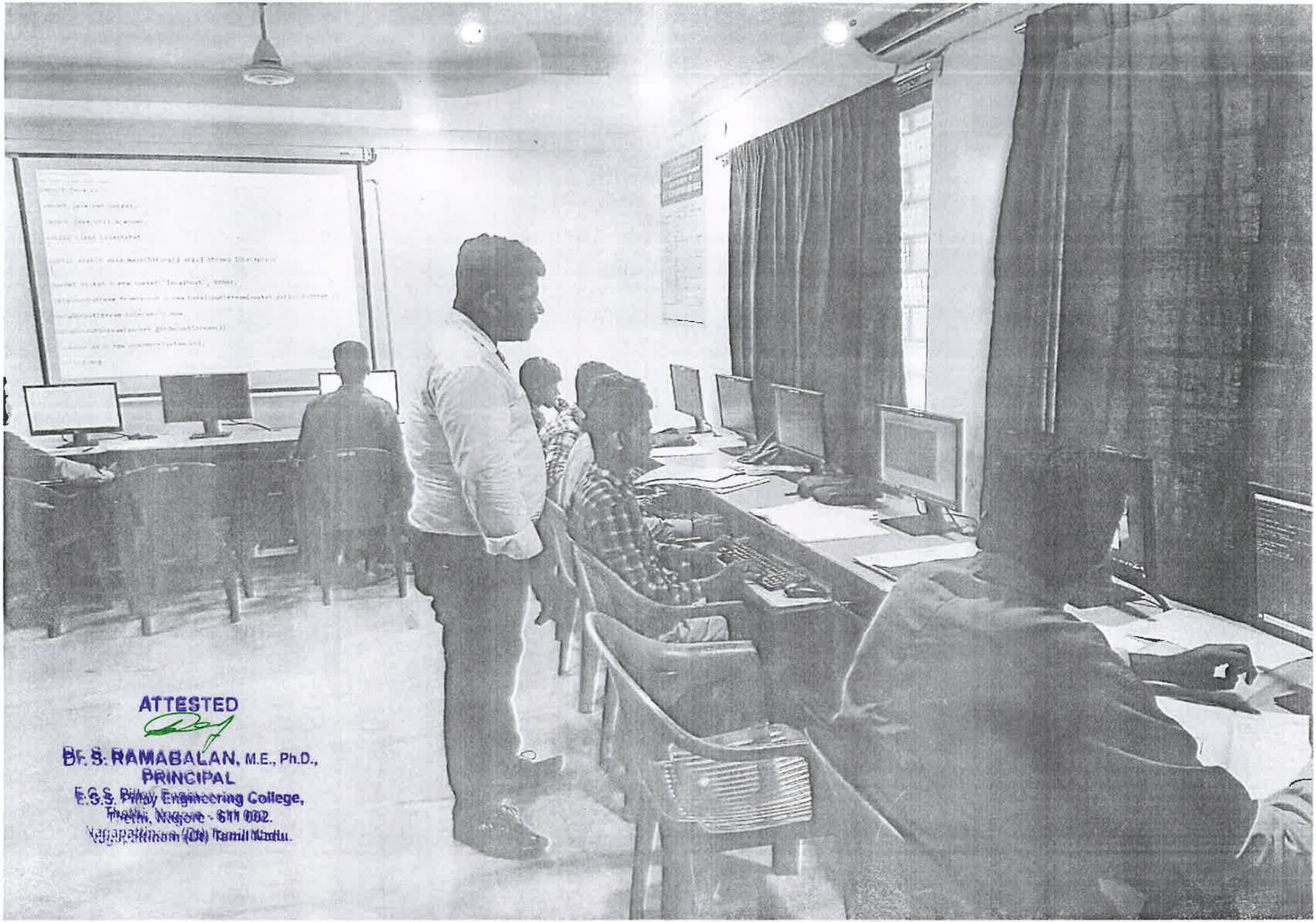
Mr./Ms. Vijayalakshmi N

has successfully completed the value added course on **"Introduction to 3G & 4G Wireless Communications"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from **13/05/2019 to 18/05/2019.**

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

COORDINATORS	HOD / CSE	PRINCIPAL
DR.N.MURALI	DR.M.CHINNADURAI	DR.S.RAMABALAN

49



ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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Nagapattinam (Dt) Tamil Nadu.

E.G.S. PILLAY ENGINEERING COLLEGE
NAGAPATTINAM, TAMILNADU, INDIA – 611002

Approved by AICTE, New Delhi & Affiliated to Anna University,Chennai
An ISO 9001: 2008 Certified Institution

Department Of Computer Science & Engineering

Organized

ONE WEEK

VALUE ADDED COURSE ON

WEB DEVELOPMENT USING PHP & MYSQL

Coordinators:	Convener:
1. Mr.M.Markco, Assistant Professor/CSE 2. Mr.K.P.Thamaraikannan, Assistant Professor/CSE	Dr.T.Ganesan, Professor/CSE

EGS PILLAY ENGINEERING COLLEGE – NAGAPATTINAM

DEPARTMENT OF CSE

Value Added Course on

"Web Development using PHP & MYSQL"

TABLE OF CONTENT

HOD/CSE

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

REQUISITION LETTER

Date: 29.04.2019

From

Mr.M.Markco,
Assistant Professor/CSE,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

To

The Principal,
E.G.S.Pillay Engineering College,
Nagapattinam.

29/4/19

Through

The Head of Department,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

Respected Sir,

Sub: Value Added Course – Reg

We are happy to inform you that we have planned to organize one week value added course on title **"Web Development using PHP & MSQL"** for UG III Year CSE Students from 06.05.2019 to 11.05.2019 for Batch I and from 13.05.2019 to 18.05.2019 for Batch II. Herewith, I enclosed name list with batch and session details. Kindly give permission for conducting the value added course.

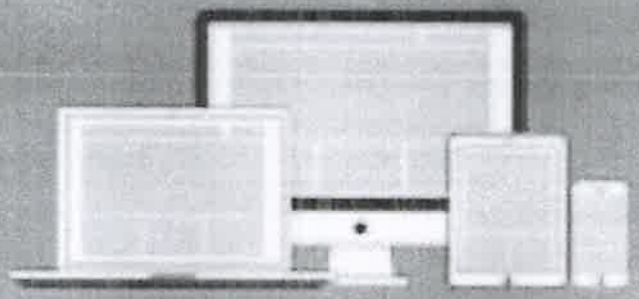
Thanking you,

yours truly,

[Mr.M.Markco]

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002



COURSE COVERAGE

INTRODUCTION TO HTML

Standard HTML Document Structure- Basic Text Markup- Images-Hypertext Links-Lists- Tables- Forms-Frames. Cascading Style Sheets Introduction to CSS – Levels of Style Sheets- Style Specification Formats-Selector Forms- Property Value Forms – Font Properties- List- Properties – Color- Alignment of Text – Background Images- Span and Div Tags.

XML

XML Vs HTML – Views of an XML document - Syntax of XML- XML Document Structure – Namespaces- XML Schem as simple XML documents – Different forms of markup that can occur in XML documents - Document Type declarations – Creating XML DTDs – Displaying XML Data in HTML browser – Converting XML to HTML with XSL minimalist XSL style sheets – XML applications

JAVASCRIPT

Java Script Introduction – Comments – Operators - Data Types, String – Control [illegible] – Functions –Scope - Arrays- Loops

PHP

Origin and Use of PHP – Overview of PHP - General Syntactic Characteristics – [illegible] – Expressions - Control Statements – Arrays – Functions – Pattern Matching – Form Handling – [illegible] – Session Tracking - Simple programs in PHP.

MYSQL

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.
PRINCIPAL
E.G.S. Pillay Engineering College,
[illegible], Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

Convenor:

Prof.Dr.T.GANESAN
PROFESSOR / CSE

Course Coordinators:

Mr.M.MARKCO
ASSISTANT PROFESSOR / CSE
&
Mr.K.P.THAMARAIKANNAN
ASSISTANT PROFESSOR / CSE

Resource Person:

Mr.S.ARAVINDHAN
ASSISTANT PROFESSOR / CSE
&
Dr.K.BALASUBRAMANIAN
ASSOCIATE PROFESSOR/CSE

Course Duration : 36 Hours

Certificate will be issued to all participants on successful completion of this course

Beneficiaries:

III CSE UG Students
2016-20 Batch

VALUE ADDED COURSE ON "WEB DEVELOPMENT USING PHP & MYSQL"

Date's

06.05.2019 - 11.05.2019 (BATCH I)
&
13.05.2019 - 18.05.2019 (BATCH II)

Organised by

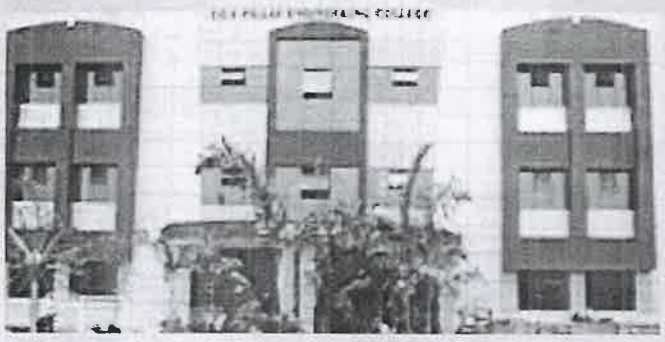
Department of CSE

at

E.G.S. PILLAY ENGINEERING COLLEGE
(AUTONOMOUS)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

ABOUT THE COLLEGE



EGS Pillay Engineering College was started in the year 1995 under the sponsorship of G. S. Pillay & Sons Educational and Charitable Trust. College has gained the reputation of being most preferred engineering college by the students. College is approved by the AICTE, New Delhi and is affiliated to Anna University from 2002 and the degrees are awarded by Anna University, as per the Government Orders. It is ISO 9001:2008 certified.

The College has earned the reputation of being one of the most preferred colleges by the students and parents last these years. Known for its excellent infrastructure and facilities for learning, the outstanding non-grant engineering college has registered impressive performance consistently. A gate-way to success, the college has now set on long-range planning to enlarge and enrich its programs and activities to empower the youth who aspire to become successful Engineers, Scientists and Managers.

ATTESTED
DR. E. BALAMURUGALAN, M.E., Ph.D.
PRINCIPAL
E.G.S. Pillay Engineering College,
Nagapattinam (Dt.), Tamil Nadu.

ABOUT THE DEPARTMENT

Department of Computer Science and Engineering programme was introduced at Edayathangudy G.S.Pillay Engineering College in the Academic Year 1995-1996. The demand for Computer Engineers in software companies, banking sectors and private sectors engaged in developing new trends of software generation is more than the engineers available.

The department has Recognized Research Centre for doing PhD / M.S. (By Research), obtained Permanent Affiliation from Anna University in the year 2014-15. The department has formed student association namely Computer Engineers Association (CEA) to promote talent of the students and their upliftment. The department has highly qualified and experienced faculties. The department has well experienced faculties in the research and more number of publications in reputed Journals and Conferences.

The department has well infrastructural facilities. From 2011 onwards every year, we are conducting International and National conferences. The B.E (CSE)

ABOUT THIS COURSE

This course is designed to start you on a path toward future studies in web development and design, no matter how little experience or technical knowledge you currently have. The web is a very big place, and if you are the typical internet user, you probably visit several websites every day, whether for business, entertainment or education. But have you ever wondered how these websites actually work? How are they built? How do browsers, computers, and mobile devices interact with the web? What skills are necessary to build a website? With almost 1 billion websites now on the internet, the answers to these questions could be your first step toward a better understanding of the internet and developing a new set of internet skills.

By the end of this course you'll be able to describe the structure and functionality of the world wide web, create dynamic web pages using a combination of HTML, CSS, and Scripting language, apply essential programming language concepts when creating HTML forms, select an appropriate web hosting service, and publish your webpages for the world to see. Finally, you'll be able to develop a working model for creating your own personal or business websites in the future and be fully prepared to take the next step in a more advanced web

E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM.
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

EGSPEC/CSE/UG/VAC/2018-19/02 **Date: 02.05.2019**

CIRCULAR

It is to inform that Department of Computer Science and Engineering is going to organize a Value Added Course on **"Web Development using PHP & MSQL"** from 06.05.2019 to 11.05.2019 for Batch I and from 13.05.2019 to 18.05.2019 for Batch II (36 hours/Batch) by, **Mr.S.Aravindhan,** Assistant Professor & **Dr.K.Balasubramanian,** Associate Professor, Department of Computer Science and Engineering, E.G.S.Pillay Engineering College (Autonomous), Nagapattinam for the benefits of III year CSE Students. All the enrolled students are instructed to attend the course without fail.

Timings: 9:15 am – 4:45 pm

Venue: GGB – CC1 Lab

CONVENER **HOD/CSE**

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Value Added Course on "*Web Development using PHP & MYSQL*"

PROGRAM SCHEDULE

BATCH I | Date : 06.05.2019 – 11.05.2019				
Session / Date	I 9:15 – 10:45 AM	II 11:00 – 1:00 PM	III 2:00 – 3:30 PM	IV 3:45 – 4:45 PM
06/05/2019	Standard HTML Document Structure, Basic Text Markup	Images, Hypertext Links, Lists,Tables	Forms, Frames, Cascading Style Sheets Introduction to CSS	Practice Session
07/05/2019	Levels of Style Sheets, Style Specification Formats, Selector Forms, Property Value Forms	Font Properties, List Properties, Color, Alignment of Text, Background Images, Span and Div Tags.	XML Vs HTML, Views of an XML document, Syntax of XML, XML Document Structure, Namespaces	Practice Session
08/05/2019	XML Schema as simple XML documents Different forms of markup that can occur in XML documents	Document Type declarations, Creating XML DTDs, Displaying XML Data in HTML browser	Converting XML to HTML with XSL minimalist XSL style sheets, XML applications	Practice Session
09/05/2019	Java Script Introduction, Comments	Operators, Data Types, String,	Conditionals, Functions, Scope, Arrays, Loops	Practice Session
10/05/2019	Origin and Use of PHP, Overview of PHP, General Syntactic Characteristics, Operations and Expressions	Control Statements, Arrays, Functions, Pattern Matching	Form Handling, FilesCookies, Session Tracking, Simple programs in PHP.	Practice Session
11/05/2019	Use of MYSQL, Overview of SQL queries	Database Connectivity and MySQL.	Practice Session	Assessment Test
BATCH II | 13.052019 – 18.05.2019				
Session / Date	I 9:15 – 10:45 AM	II 11:00 – 1:00 PM	III 2:00 – 3:30 PM	IV 3:45 – 4:45 PM
13/05/2019	Standard HTML Document Structure, Basic Text Markup	Images, Hypertext Links, Lists,Tables	Forms, Frames, Cascading Style Sheets Introduction to CSS	Practice Session
14/05/2019	Levels of Style Sheets, Style Specification Formats, Selector Forms, Property Value Forms	Font Properties, List Properties, Color, Alignment of Text, Background Images, Span and Div Tags.	XML Vs HTML, Views of an XML document, Syntax of XML, XML Document Structure, Namespaces	Practice Session
15/05/2019	XML Schema as simple XML documents Different forms of markup that can occur in XML documents	Document Type declarations, Creating XML DTDs, Displaying XML Data in HTML browser	Converting XML to HTML with XSL minimalist XSL style sheets, XML applications	Practice Session
16/05/2019	Java Script Introduction, Comments	Operators, Data Types, String,	Conditionals, Functions, Scope, Arrays, Loops	Practice Session
17/05/2019	Origin and Use of PHP, Overview of PHP, General Syntactic Characteristics, Operations and Expressions	Control Statements, Arrays, Functions, Pattern Matching	Form Handling, FilesCookies, Session Tracking, Simple programs in PHP.	Practice Session
18/05/2019	Use of MYSQL, Overview of SQL queries	Database Connectivity and MySQL.	Practice Session	Assessment Test

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

HOD/CSE

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

SYLLABUS

VALUE ADDED COURSE ON WEB DEVELOPMENT USING PHP & MYSQL		
COURSE OBJECTIVES:		
	1. To impart the new concepts in Web Technologies	
	2. To develop understanding about the different technologies used in the World Wide Web including XML, Perl, Rails and PHP	
Module I	**INTRODUCTION TO HTML**	**8 Hours**
Standard HTML Document Structure- Basic Text Markup- Images-Hypertext Links-Lists- Tables-Forms- Frames. Cascading Style Sheets Introduction to CSS – Levels of Style Sheets- Style Specification Formats- Selector Forms- Property Value Forms – Font Properties- List Properties – Color- Alignment of Text – Background Images- Span and Div Tags.		
Module II	**XML**	**7 Hours**
XML Vs HTML – Views of an XML document - Syntax of XML- XML Document Structure – Namespaces- XML Schema as simple XML documents – Different forms of markup that can occur in XML documents - Document Type declarations – Creating XML DTDs – Displaying XML Data in HTML browser – Converting XML to HTML with XSL minimalist XSL style sheets – XML applications		
Module III	**JAVA SCRIPT**	**7 Hours**
Java Script Introduction – Comments – Operators - Data Types, String – Conditionals – Functions – Scope – Arrays- Loops		
Module IV	**PHP**	**8 Hours**
Origin and Use of PHP- Overview of PHP- General Syntactic Characteristics Operations and Expressions- Control Statements- Arrays- Functions-Pattern Matching- Form Handling-FilesCookies-Session Tracking -, Simple programs in PHP.		
Module V	**MYSQL**	**6 Hours**
Use of MYSQL- Overview of SQL queries - Database Connectivity and MySQL.		
	Total:	**36 Hours**
COURSE OUTCOMES:		
	After completion of the course, Student will be able to	
CO1	Develop web pages using basic HTML	
CO2	Apply XML techniques in web design	
CO3	Understand Java Scripting concepts	
CO4	Implement PHP Programs	
CO5	Develop MySQL database connectivity for real world applications	
REFERENCES:		
1. Deitel & Deitel, Nieto, Lin, Sadhu, XML How to Program, Pearson Education ,New Delhi, 2016		
2. Kogent Learning Solutions Inc, Web Technologies Black Book, Dreamtech Press, New Delhi, 2013		

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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Nagapattinam (Dt) Tamil Nadu.

HOD/CSE

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF CSE

VALUE ADDED COURSE ON "WEB DEVELOPMENT USING PHP & MYSQL"

ENROLLMENT LIST

S.No	Register Number	Name of Student	BATCH
1.	820816104001	AAKASH A	I
2.	820816104002	AARTHI M	I
3.	820816104003	ABINAYA K	I
4.	820816104004	ABINAYA M D	I
5.	820816104005	AJITH KUMAR S	I
6.	820816104006	ANANTHI S	I
7.	820816104007	ANUSHA S	I
8.	820816104008	ANUSUYA A	I
9.	820816104009	ANUSUYA R	I
10.	820816104010	ARAVINDH N	I
11.	820816104011	ASHWIN G	I
12.	820816104012	ASWINI M	I
13.	820816104013	BALASURYA N	I
14.	820816104014	BAVITHRA R	I
15.	820816104015	BIRUNDHA M	I
16.	820816104016	BISMIL HUDHA S	I
17.	820816104017	DEVI V	I
18.	820816104018	DHARMARAJA S	I
19.	820816104019	DHEEPTHI R	I
20.	820816104020	DHIVANI G	I
21.	820816104021	DHIVYABHARADHI B	I
22.	820816104022	DHIVYADHARSHINI T	I
23.	820816104023	DURAIARASAN S	I
24.	820816104024	GAYATHRI G	I
25.	820816104025	GAYATHRI M	I
26.	820816104026	GAYATHRI M	I
27.	820816104027	GIRIJA S	I
28.	820816104028	HARINISHRI P	I
29.	820816104029	HEMALATHA G	I
30.	820816104030	ISHWARYA M	I
31.	820816104031	JANARDANI K	I
32.	820816104032	JAYACHANDRAN R	I
33.	820816104033	JAYAKANTH J	I
34.	820816104034	JAYAMUKESH R	I
35.	820816104035	JAYASREE R	I
36.	820816104036	KAMALI S	I
37.	820816104037	KARUTHAMMA P	I
38.	820816104038	KAVIYARASAN S	I
39.	820816104039	KAYALVIZHI D	I
40.	820816104040	KAYALVIZHI E	I

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

41.	820816104041	KEERTHANA B	I
42.	820816104042	KIRUBA S	I
43.	820816104043	KOWSAKI M	I
44.	820816104045	MADHURABASHINI K	I
45.	820816104046	MANIMOZHI D	I
46.	820816104047	MANISHA M	I
47.	820816104048	MANJUPARKAVI P	I
48.	820816104049	MANOSEELAN G	I
49.	820816104050	MATHUMATHI R	I
50.	820816104051	METHANRAJ S	I
51.	820816104052	MOHAMED IBRAHIMSHAIBU MARIKYAR N	I
52.	820816104053	MOHAMED SHAIK ALAWUDEEN A	I
53.	820816104054	MONIKA M	I
54.	820816104055	NANDHINI R	I
55.	820816104056	NAVEENAJAGADESWARI D	I
56.	820816104057	NISHANTHINI G	I
57.	820816104058	NITHESH E	I
58.	820816104059	NITHYAPRIYA A	I
59.	820816104060	NITHYAPRIYA R	I
60.	820816104061	NIVETHA B	I
61.	820816104063	PARIMALA S	I
62.	820816104064	PARKAVI S	I
63.	820816104065	PAVITHRA S	II
64.	820816104066	PRAGATHI J	II
65.	820816104067	PRAMILA R	II
66.	820816104068	PRASANTH M	II
67.	820816104069	PREETHINISHA K	II
68.	820816104070	PRIYA A	II
69.	820816104071	PRIYADHARSHINI A	II
70.	820816104072	PRIYADHARSHINI M	II
71.	820816104074	PRIYADHARSHINI T	II
72.	820816104075	PUSHPALATHA P	II
73.	820816104076	RAJASUNDARI M	II
74.	820816104077	RAJESWARI R	II
75.	820816104078	RAJITHA R	II
76.	820816104079	RAMEEZ THARIQ A	II
77.	820816104080	RAMPRAKASH S	II
78.	820816104081	RAMPRASATH T	II
79.	820816104083	RETHINAKUMARI P	II
80.	820816104084	ROSHINI G	II
81.	820816104085	SALOMIYA R	II
82.	820816104086	SANGEETHA J	II
83.	820816104087	SANGEETHA R	II
84.	820816104088	SANTHIYA A	II
85.	820816104089	SANTHIYA G	II
86.	820816104090	SARANYA S	II
87.	820816104091	SATHANA V	II
88.	820816104092	SATHISH S	II

ATTESTED

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Nagapattinam (Dt), Tamil Nadu.

89.	820816104093	SATHYA R	II
90.	820816104094	SHIBA B	II
91.	820816104095	SILAMBARASI B	II
92.	820816104096	SIVASANGARI K	II
93.	820816104097	SRILEKA M	II
94.	820816104098	STEFFYGRAFF M	II
95.	820816104099	SUBA S	II
96.	820816104100	SUBASHINI R	II
97.	820816104101	SUBASHRI T	II
98.	820816104102	SUBASREE P	II
99.	820816104103	SUBASRI S	II
100.	820816104105	SUGANTHI A	II
101.	820816104106	SUGUNA G	II
102.	820816104107	SUMITHA P	II
103.	820816104109	SURYAPRAKASH T	II
104.	820816104111	TAMIZHMOZHI T	II
105.	820816104112	THASLEEMA NAZREEN M	II
106.	820816104114	VAITHEESWARI M	II
107.	820816104115	VANITHA G	II
108.	820816104116	VARSHA G	II
109.	820816104117	VARSHINI M	II
110.	820816104118	VARSHINI V	II
111.	820816104119	VASUMATHI T	II
112.	820816104120	VENKADESHWARAN S	II
113.	820816104121	VICHITHRA B	II
114.	820816104122	VIJAYASRI P	II
115.	820816104123	VINOLIYA G	II
116.	820816104125	YOGESWARI A	II
117.	820816104126	YUVARAJA P	II
118.	820816104301	ABINASH P	II
119.	820816104302	ARUNKUMAR R	II
120.	820816104309	MAGESHWARI M	II
121.	820816104310	SRIMATHI M	II
122.	820816104701	SINDHUJA R	II
123.	820816104702	THIPAK MANJREKAR K	II

Course Coordinators

HoD/CSE

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(Academic Year: 2018-2019)

VALUE ADDED COURSE ON "WEB DEVELOPMENT USING PHP & MYSQL"

STUDENT ATTENDANCE SHEET

Batch I

Date : 06.05.2019 – 11.05.2019

S.No	Register Number	Name of Student	06.05.19		07.05.19		08.05.19		09.05.19		10.05.19		11.05.19	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	820816104001	AAKASH A	/	/	/	/	/	/	/	/	AB	AB	/	/
2.	820816104002	AARTHI M	/	/	/	/	/	/	/	/	/	/	/	/
3.	820816104003	ABINAYA K	/	/	/	/	/	/	/	/	/	/	/	/
4.	820816104004	ABINAYA M D	/	/	/	/	/	/	/	/	/	/	/	/
5.	820816104005	AJITH KUMAR S	/	/	/	/	/	/	/	/	/	/	/	/
6.	820816104006	ANANTHI S	/	/	/	/	/	/	/	/	/	/	/	/
7.	820816104007	ANUSHA S	/	/	/	/	/	/	/	/	/	/	/	/
8.	820816104008	ANUSUYA A	/	/	/	/	/	/	/	/	/	/	/	/
9.	820816104009	ANUSUYA R	/	/	/	/	/	/	/	/	/	/	/	/
10.	820816104010	ARAVINDH N	/	/	AB	AB	/	/	/	/	/	/	/	/
11.	820816104011	ASHWIN G	/	/	/	/	/	/	/	/	/	/	/	/
12.	820816104012	ASWINI M	/	/	/	/	/	/	/	/	/	/	/	/
13.	820816104013	BALASURYA N	/	/	/	/	/	/	/	/	/	/	/	/
14.	820816104014	BAVITHRA R	/	/	/	/	/	/	/	/	/	/	/	/
15.	820816104015	BIRUNDHA M	/	/	/	/	/	/	/	/	/	/	/	/
16.	820816104016	BISMIL HUDHA S	/	/	/	/	/	/	/	/	/	/	/	/
17.	820816104017	DEVI V	/	/	/	/	/	/	/	/	/	/	/	/
18.	820816104018	DHARMARAJA S	/	/	/	/	/	/	/	/	/	/	/	/
19.	820816104019	DHEEPTHI R	/	/	/	/	/	/	/	/	/	/	/	/
20.	820816104020	DHIVANI G	/	/	/	/	/	/	/	/	/	/	/	/
21.	820816104021	DHIVYABHARADHI B	/	/	AB	AB	/	/	/	/	/	/	/	/
22.	820816104022	DHIVYADHARSHINI T	/	/	/	/	/	/	/	/	/	/	/	/

ATTESTED

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E.G.S.P. Engineering College,
Nagapattinam - 611 002

23.	820816104023	DURAIARASAN S	/	/	/	/	/	/	/	/	/	/	/	/		
24.	820816104024	GAYATHRI G	/	/	/	/	/	/	/	/	/	/	/	/		
25.	820816104025	GAYATHRI M	/	/	/	/	/	/	/	/	/	/	/	/		
26.	820816104026	GAYATHRI M	/	/	/	/	/	/	/	/	/	/	/	/		
27.	820816104027	GIRIJA S	/	/	/	/	/	/	/	/	/	/	/	/		
28.	820816104028	HARINISHRI P	/	/	/	/	/	/	/	/	/	/	/	/		
29.	820816104029	HEMALATHA G	/	/	/	/	/	/	/	/	/	/	/	/		
30.	820816104030	ISHWARYA M	/	/	/	/	/	/	/	/	/	/	/	/		
31.	820816104031	JANARDANI K	/	/	/	/	/	/	/	/	AB	AB	/	/		
32.	820816104032	JAYACHANDRAN R	/	/	/	/	/	/	/	/	/	/	/	/		
33.	820816104033	JAYAKANTH J	/	/	/	/	/	/	/	/	/	/	/	/		
34.	820816104034	JAYAMUKESH R	/	/	/	/	AB	AB	/	/	/	/	/	/		
35.	820816104035	JAYASREE R	/	/	/	/	/	/	/	/	/	/	/	/		
36.	820816104036	KAMALI S	/	/	/	/	/	/	/	/	/	/	/	/		
37.	820816104037	KARUTHAMMA P	/	/	/	/	/	/	/	/	/	/	/	/		
38.	820816104038	KAVIYARASAN S	/	/	/	/	/	/	/	/	/	/	/	/		
39.	820816104039	KAYALVIZHI D	/	/	/	/	/	/	/	/	/	/	/	/		
40.	820816104040	KAYALVIZHI E	/	/	/	/	/	/	/	/	/	/	/	/		
41.	820816104041	KEERTHANA B	/	/	/	/	/	/	/	/	/	/	/	/		
42.	820816104042	KIRUBA S	/	/	/	/	/	/	/	/	/	/	/	/		
43.	820816104043	KOWSAKI M	/	/	/	/	/	/	/	/	/	/	/	/		
44.	820816104045	MADHURABASHINI K	/	/	/	/	/	/	/	/	AB	AB	/	/		
45.	820816104046	MANIMOZHI D	/	/	/	/	/	/	/	/	/	/	/	/		
46.	820816104047	MANISHA M	/	/	/	/	/	/	/	/	/	/	/	/		
47.	820816104048	MANJUPARKAVI P	/	/	AB	AB	/	/	/	/	/	/	/	/		
48.	820816104049	MANOSEELAN G	/	/	/	/	/	/	/	/	/	/	/	/		
49.	820816104050	MATHUMATHI R	/	/	/	/	/	/	/	/	/	/	/	/		
50.	820816104051	METHANRAJ S	/	/	/	/	/	/	/	/	/	/	/	/		
51.	820816104052	MOHAMED IBRAHIMSHAIBU MARIKYAR N	/	/	/	/	/	/	/	/	/	/	/	/		
52.	820816104053	MOHAMED SHAIK ALAWUDEEN A	/	/	/	/	/	/	/	/	/	/	/	/		
53.	820816104054	MONIKA M	/	/	/	/	/	/	/	/	/	/	/	/		
54.	820816104055	NANDHINI R	/	/	/	/	/	/	/	/	/	/	/	/		
55.	820816104056	NAVEENAJAGADESWARI D	/	/	/	/	/	/	/	/	/	/	/	/		

ATTESTED

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HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

56.	820816104057	NISHANTHINI G	/	/	/	/	AB	AB	/	/	/	/	/	/
57.	820816104058	NITHESH E	/	/	/	/	/	/	/	/	/	/	/	/
58.	820816104059	NITHYAPRIYA A	/	/	/	/	/	/	/	/	/	/	/	/
59.	820816104060	NITHYAPRIYA R	/	/	/	/	/	/	/	/	/	AB	/	/
60.	820816104061	NIVETHA B	/	/	/	/	/	/	/	/	/	/	/	/
61.	820816104063	PARIMALA S	/	/	/	/	/	/	/	/	/	/	/	/
62.	820816104064	PARKAVI S	/	/	/	/	AB	AB	/	/	/	/	/	/
Total Present			62	62	59	59	59	59	62	62	59	58	62	62
Total Absent			–	–	3	3	3	3	–	–	03	04	–	–
Course Coordinator Signature														

(Course Coordinator)

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HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

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Dr. S. RAMABALAN, M.E., Ph.D.,
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E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(Academic Year: 2018-2019)

VALUE ADDED COURSE ON "WEB DEVELOPMENT USING PHP & MYSQL"

STUDENT ATTENDANCE SHEET

Batch II

Date : 13.05.2019 – 18.05.2019

S.No	Register Number	Name of Student	13.05.19		14.05.19		15.05.19		16.05.19		17.05.19		18.05.19	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	820816104065	PAVITHRA S	/	/	/	/	/	/	/	/	/	/	/	/
2.	820816104066	PRAGATHI J	/	/	/	/	/	/	/	/	/	/	/	/
3.	820816104067	PRAMILA R	/	/	/	/	/	/	/	/	/	/	/	/
4.	820816104068	PRASANTH M	/	/	/	/	/	/	AB	AB	/	/	/	/
5.	820816104069	PREETHINISHA K	/	/	/	/	/	/	/	/	/	/	/	/
6.	820816104070	PRIYA A	/	/	/	/	/	/	/	/	/	/	/	/
7.	820816104071	PRIYADHARSHINI A	/	/	AB	AB	/	/	AB	AB	/	/	/	/
8.	820816104072	PRIYADHARSHINI M	/	/	/	/	/	/	/	/	/	/	/	/
9.	820816104074	PRIYADHARSHINI T	/	/	/	/	/	/	/	/	/	/	/	/
10.	820816104075	PUSHPALATHA P	/	/	/	/	/	/	/	/	/	/	/	/
11.	820816104076	RAJASUNDARI M	/	/	/	/	/	/	/	/	/	/	/	/
12.	820816104077	RAJESWARI R	AB	AB	/	/	/	/	/	/	/	/	/	/
13.	820816104078	RAJITHA R	/	/	/	/	/	/	/	/	/	/	/	/
14.	820816104079	RAMEEZ THARIQ A	/	/	/	/	/	/	/	/	/	/	/	/
15.	820816104080	RAMPRAKASH S	/	/	/	/	/	/	/	/	/	/	/	/
16.	820816104081	RAMPRASATH T	/	/	/	/	/	/	AB	AB	/	/	/	/
17.	820816104083	RETHINAKUMARI P	/	/	/	/	/	/	/	/	/	/	/	/
18.	820816104084	ROSHINI G	/	/	/	/	/	/	/	/	/	/	/	/
19.	820816104085	SALOMIYA R	/	/	/	/	/	/	/	/	/	/	/	/
20.	820816104086	SANGEETHA J	/	/	/	/	/	/	/	/	/	/	/	/

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Nagapattinam (Dt) Tamil Nadu.

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DEPARTMENT OF CSE
E.G.S.P. Engineering College.

21.	820816104087	SANGEETHA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22.	820816104088	SANTHIYA A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
23.	820816104089	SANTHIYA G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
24.	820816104090	SARANYA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
25.	820816104091	SATHANA V	/	/	/	/	AB	AB	/	/	/	/	/	/	/	/	/	/	/
26.	820816104092	SATHISH S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
27.	820816104093	SATHYA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
28.	820816104094	SHIBA B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
29.	820816104095	SILAMBARASI B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
30.	820816104096	SIVASANGARI K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
31.	820816104097	SRILEKA M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
32.	820816104098	STEFFYGRAFF M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
33.	820816104099	SUBA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
34.	820816104100	SUBASHINI R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
35.	820816104101	SUBASHRI T	/	/	/	/	/	/	AB	AB	/	/	/	/	/	/	/	/	/
36.	820816104102	SUBASREE P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37.	820816104103	SUBASRI S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38.	820816104105	SUGANTHI A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
39.	820816104106	SUGUNA G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
40.	820816104107	SUMITHA P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
41.	820816104109	SURYAPRAKASH T	AB	AB	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
42.	820816104111	TAMIZHMOZHI T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
43.	820816104112	THASLEEMA NAZREEN M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
44.	820816104114	VAITHEESWARI M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
45.	820816104115	VANITHA G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
46.	820816104116	VARSHA G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
47.	820816104117	VARSHINI M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
48.	820816104118	VARSHINI V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	AB	/	/
49.	820816104119	VASUMATHI T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
50.	820816104120	VENKADESHWARAN S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
51.	820816104121	VINCHITHRA B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
52.	820816104122	VIJAYASRI P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
53.	820816104123	VINOLIYA G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

ATTESTED

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DEPARTMENT OF CSE
E.G.S.R Engineering College

54.	820816104125	YOGESWARI A	/	/	/	/	/	/	/	/	/	/	/	/	/	/
55.	820816104126	YUVARAJA P	/	/	/	/	/	/	/	/	/	/	/	/	/	/
56.	820816104301	ABINASH P	/	/	/	/	/	/	/	/	/	/	/	/	/	/
57.	820816104302	ARUNKUMAR R	/	/	/	/	/	/	AB	AB	/	/	/	/	/	/
58.	820816104309	MAGESHWARI M	/	/	/	/	/	/	/	/	/	/	/	/	/	/
59.	820816104310	SRIMATHI M	/	/	/	/	/	/	/	/	/	/	/	/	/	/
60.	820816104701	SINDHUJA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/
61.	820816104702	THIPAK MANJREKAR K	AB	AB	/	/	/	/	/	/	/	/	/	/	/	/
Total Present			58	58	60	60	60	60	56	56	61	61	60	61		
Total Absent			3	3	1	1	1	1	05	05	—	—	01	0		
Course Coordinator Signature			Cor	Cor	Cor	Cor	Cor	Cor	Cor	Cor	Cor	Cor	Cor	Cor		

Cor
(Course Co-ordinator)

HoD/CSE

HEAD OF THE DEPARTMENT
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E.G.S.P. Engineering College,
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COURSE MATERIAL

Module I – INTRODUCTION TO HTML

HTML INTRODUCTION

HTML stands for Hypertext Markup Language and it is a widely used programming language used to develop web pages.

What is HTML?

HTML Stands for HyperText Markup Language, where HyperText stands for Link between web pages. Markup Language means Text between tags that define the structure.

HTML is a markup language that is used to create web pages. It defines how the web page looks and how to display content with the help of elements. It forms or defines the structure of our Web Page, thus it forms or defines the structure of our Web Page. We must remember to save your file with .html extension.

Applications of HTML

HTML is used for various purposes. Let us take a look at them

1. Web Pages Development
   HTML is famously used for creating web pages on the world wide web. Every web page contains a set of HTML tags and hyperlinks which are used to connect other pages. Every page on the internet is written using HTML.
2. Navigating the Internet
   Navigating on the internet would have been quite a tedious task without HTML. The anchor tags of HTML allows us to link pages and navigate easily. Imagine our life without anchor tags, you would literally have to enter URL everytime. Using achor tags, you can also navigate within a webpage.
3. Embedding Images and Videos
   HTML allows us to embed images and videos with ease and gives us features to adjust height, position and even rendering type. You can adjust controls, thumbnails, timestamps and much more for videos. Earlier this was done using Flash and HTML has made it easier with the help of <video> tag.
4. Client-side storage
   HTML5 has made client-side storage possible using localStorage and IndexD due to which we no longer need to reply on Cookies. Both of these tactics have their own set of rules and characteristics. String-based hash-table storage is provided by localStorage. Its API is straightforward, with setItem, getItem, and removeItem functions available to developers. On the other hand, IndexDB is a larger and more capable client-side data store. With the user's permission, the IndexDB database can be enlarged.
5. Data entry support
   With the usage of new HTML5 standards in all the latest browsers, developers can simply add the tags for required fields, text, data format, etc. and get the data. HTML5 now has several new attributes for data-entry and validation purposes.
6. Interacting with Native APIs
   With the help of HTML, you can interact with your Operating system. With this feature, you can easily drag files onto a web page to upload, full-screen a video, and much more.

Features Of HTML

The learning curve is very easy (easy to modify)
Creating effective presentations
Adding Links wherein we can add references
Can display documents on platforms like Mac, Windows, Linux, etc
Adding videos, graphics, and audios making it more attractive
Case insensitive language

HTML Editor

Simple editor: Notepad, Notepad++ , Atom
Best editor: Sublime Text

HTML Skeleton

```
<!DOCTYPE html>
<html>
<head>
<title></title>
</head>
<body>
</body>
</html>
```

HTML Basic

<!DOCTYPE html>
Instruction to the browser about the HTML version.
<html>
Root element which acts as a container to hold all the code
The browser should know that this is an HTML document
Permitted content: One head tag followed by one body tag
<head>
Everything written here will never be displayed in the browser
It contains general information about the document
Title, definitions of CSS and script sheets
Metadata(information about the document)
<body>
Everything written here will be displayed in the browser
Contains text, images, links that can be achieved through tags
Examples:
- This is our first paragraph.
- Go To Google
- <img src="photo.jpg">

HTML Comment

Comments don't render on the browser
Helps to understand our code better and makes it readable.
Helps to debug our code

HTML Elements

Elements are created using tags. Elements are used to define the semantics. Can be nested and empty

What is HTML Elements Definition

 This is our first Paragraph

Explanation:

Start tag:
Attributes: color =" red"
End tag : // optional
Content: This is our first Paragraph

Types of Elements

There are different types of elements in HTML. Before moving ahead in the HTML Tutorial, let us understand the types of elements.

- Block Level
  - Takes up full block or width and adds structure in the web page
  - Always starts from the new line
  - Always end before the new line
  - Example:

  , , <h1>...<h6>, <ol>,
- Inline Level
  - Takes up what is requires and adds meaning to the web page
  - Always starts from where the previous element ended
  - Example :

   , , , <img>, <a>

HTML Attributes

Properties associated with each tag is called an Attribute.

<tag name="value"></tag> is the structure.

There are some Global Attributes that can be applied to all the tags.

Title: Add extra information (hover)
Style: Add style information(font,background,color,size)

There are some attributes that can be applied to specific tags.

<img src=" URL" width="100" height="70" alt=" File cannot be loaded">

src is the attribute used in image tag to define the path
Width is an attribute used to define width in pixels
Height is an attribute used to define width in pixels
Alt i.e alternate text if an image is not loaded

Name of the link

href is used for defining the path of the link
color is used to set the color of the horizontal line drawn on the webpage.

HTML Tags

Enclosed within <>
Different tags render different meanings.
Example: <img>

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DEPARTMENT OF CSE

VALUE ADDED COURSE ON WEB DEVELOPMENT USING PHP & MYSQL

FROM 06/05/2019 TO 11/05/2019

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Multiple Choice Questions (20*1 = 20)

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d) <iframe>

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b) <paint>
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3. In HTML, which attribute is used to create a link that opens in a new window tab?
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b) <xml version="1.0" encoding="UTF-8"></xml>
c) <?xml version="1.0" encoding="UTF-8"?>
d) <?xml type="document" version="1.0" encoding="UTF-8"?>

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Answers:

1	2	3	4	5	6	7	8	9	10
d	c	d	c	d	b	d	a	c	c
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
c	a	d	a	a	d	d	c	d	d

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FROM 13/05/2019 TO 18/05/2019

Assessment Questions – SET 2

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VALUE ADDED COURSE ON WEB DEVELOPMENT USING PHP & MYSQL

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EGS Pillay Engineering College, Nagapattinam			
Department of CSE			
Academic Year : 2018-2019			
Value added course on Web Development using PHP & MySQL			
Batch: 2016-2020			
Mark Sheet			
S. No	Register Number	Name	Marks
1.	820816104001	AAKASH A	19
2.	820816104002	AARTHI M	20
3.	820816104003	ABINAYA K	17
4.	820816104004	ABINAYA M D	18
5.	820816104005	AJITH KUMAR S	19
6.	820816104006	ANANTHI S	19
7.	820816104007	ANUSHA S	15
8.	820816104008	ANUSUYA A	17
9.	820816104009	ANUSUYA R	18
10.	820816104010	ARAVINDH N	16
11.	820816104011	ASHWIN G	18
12.	820816104012	ASWINI M	17
13.	820816104013	BALASURYA N	16
14.	820816104014	BAVITHRA R	15
15.	820816104015	BIRUNDHA M	18
16.	820816104016	BISMIL HUDHA S	17
17.	820816104017	DEVI V	20
18.	820816104018	DHARMARAJA S	16
19.	820816104019	DHEEPTHI R	18
20.	820816104020	DHIVANI G	19
21.	820816104021	DHIVYABHARADHI B	15
22.	820816104022	DHIVYADHARSHINI T	17
23.	820816104023	DURAIARASAN S	15
24.	820816104024	GAYATHRI G	17
25.	820816104025	GAYATHRI M	19
26.	820816104026	GAYATHRI M	18
27.	820816104027	GIRIJA S	17
28.	820816104028	HARINISHRI P	18
29.	820816104029	HEMALATHA G	15
30.	820816104030	ISHWARYA M	16
31.	820816104031	JANARDANI K	20
32.	820816104032	JAYACHANDRAN R	19
33.	820816104033	JAYAKANTH J	20
34.	820816104034	JAYAMUKESH R	18
35.	820816104035	JAYASREE R	19
36.	820816104036	KAMALI S	
37.	820816104037	KARUTHAMMA P	19

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38.	820816104038	KAVIYARASAN S	17
39.	820816104039	KAYALVIZHI D	18
40.	820816104040	KAYALVIZHI E	19
41.	820816104041	KEERTHANA B	16
42.	820816104042	KIRUBA S	15
43.	820816104043	KOWSAKI M	18
44.	820816104045	MADHURABASHINI K	20
45.	820816104046	MANIMOZHI D	15
46.	820816104047	MANISHA M	18
47.	820816104048	MANJUPARKAVI P	15
48.	820816104049	MANOSEELAN G	17
49.	820816104050	MATHUMATHI R	19
50.	820816104051	METHANRAJ S	18
51.	820816104052	MOHAMED IBRAHIMSHAIBU MARIKYAR N	17
52.	820816104053	MOHAMED SHAIK ALAWUDEEN A	18
53.	820816104054	MONIKA M	18
54.	820816104055	NANDHINI R	19
55.	820816104056	NAVEENAJAGADESWARI D	18
56.	820816104057	NISHANTHINI G	19
57.	820816104058	NITHESH E	15
58.	820816104059	NITHYAPRIYA A	19
59.	820816104060	NITHYAPRIYA R	17
60.	820816104061	NIVETHA B	18
61.	820816104063	PARIMALA S	16
62.	820816104064	PARKAVI S	19
63.	820816104065	PAVITHRA S	16
64.	820816104066	PRAGATHI J	17
65.	820816104067	PRAMILA R	18
66.	820816104068	PRASANTH M	15
67.	820816104069	PREETHINISHA K	17
68.	820816104070	PRIYA A	16
69.	820816104071	PRIYADHARSHINI A	15
70.	820816104072	PRIYADHARSHINI M	18
71.	820816104074	PRIYADHARSHINI T	15
72.	820816104075	PUSHPALATHA P	17
73.	820816104076	RAJASUNDARI M	19
74.	820816104077	RAJESWARI R	19
75.	820816104078	RAJITHA R	18
76.	820816104079	RAMEEZ THARIQ A	16
77.	820816104080	RAMPRAKASH S	17
78.	820816104081	RAMPRASATH T	17
79.	820816104083	RETHINAKUMARI P	15
80.	820816104084	ROSHINI G	16
81.	820816104085	SALOMIYA R	19

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82.	820816104086	SANGEETHA J	19
83.	820816104087	SANGEETHA R	19
84.	820816104088	SANTHIYA A	18
85.	820816104089	SANTHIYA G	16
86.	820816104090	SARANYA S	19
87.	820816104091	SATHANA V	16
88.	820816104092	SATHISH S	18
89.	820816104093	SATHYA R	17
90.	820816104094	SHIBA B	16
91.	820816104095	SILAMBARASI B	14
92.	820816104096	SIVASANGARI K	18
93.	820816104097	SRILEKA M	19
94.	820816104098	STEFFYGRAFF M	15
95.	820816104099	SUBA S	17
96.	820816104100	SUBASHINI R	15
97.	820816104101	SUBASHRI T	17
98.	820816104102	SUBASREE P	19
99.	820816104103	SUBASRI S	17
100.	820816104105	SUGANTHI A	17
101.	820816104106	SUGUNA G	18
102.	820816104107	SUMITHA P	19
103.	820816104109	SURYAPRAKASH T	18
104.	820816104111	TAMIZHMOZHI T	18
105.	820816104112	THASLEEMA NAZREEN M	15
106.	820816104114	VAITHEESWARI M	16
107.	820816104115	VANITHA G	19
108.	820816104116	VARSHA G	16
109.	820816104117	VARSHINI M	18
110.	820816104118	VARSHINI V	19
111.	820816104119	VASUMATHI T	16
112.	820816104120	VENKADESHWARAN S	15
113.	820816104121	VICHITHRA B	16
114.	820816104122	VIJAYASRI P	19
115.	820816104123	VINOLIYA G	17
116.	820816104125	YOGESWARI A	18
117.	820816104126	YUVARAJA P	16
118.	820816104301	ABINASH P	15
119.	820816104302	ARUNKUMAR R	17
120.	820816104309	MAGESHWARI M	18
121.	820816104310	SRIMATHI M	19
122.	820816104701	SINDHUJA R	18
123.	820816104702	THIPAK MANJREKAR K	17

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HOD/CSE

OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Value Added Course on "Web Development using PHP & MySQL"

Impact analysis report

Batch: 2016-2020

S.NO	REGISTER No	STUDENT NAME	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1.	820816104001	AAKASH A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
2.	820816104002	AARTHI M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.	820816104003	ABINAYA K	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1
4.	820816104004	ABINAYA M D	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
5.	820816104005	AJITH KUMAR S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
6.	820816104006	ANANTHI S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
7.	820816104007	ANUSHA S	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1	1	0	1	1
8.	820816104008	ANUSUYA A	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1
9.	820816104009	ANUSUYA R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1
10.	820816104010	ARAVINDH N	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0
11.	820816104011	ASHWIN G	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1
12.	820816104012	ASWINI M	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1
13.	820816104013	BALASURYA N	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	0
14.	820816104014	BAVITHRA R	1	1	1	0	1	1	1	0	1	0	1	1	1	1	0	1	1	1	1	0
15.	820816104015	BIRUNDHA M	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
16.	820816104016	BISMIL HUDHA S	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1
17.	820816104017	DEVI V	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.	820816104018	DHARMARAJA S	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0
19.	820816104019	DHEEPTHI R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1
20.	820816104020	DHIVANI G	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
21.	820816104021	DHIVYABHARADHI B	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1
22.	820816104022	DHIVYADHARSHINI T	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1
23.	820816104023	DHARANIBASAN S	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	0	0	1	1
24.	820816104024	GAYATHRI G	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1

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25.	820816104025	GAYATHRI M	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
26.	820816104026	GAYATHRI M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1
27.	820816104027	GIRIJA S	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1
28.	820816104028	HARINISHRI P	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
29.	820816104029	HEMALATHA G	1	0	1	0	1	1	1	1	1	0	0	1	1	1	0	1	1	1	1	1
30.	820816104030	ISHWARYA M	0	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	0	1
31.	820816104031	JANARDANI K	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32	820816104032	JAYACHANDRAN R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
33.	820816104033	JAYAKANTH J	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.	820816104034	JAYAMUKESH R	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
35.	820816104035	JAYASREE R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
36.	820816104036	KAMALI S	1	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	0	1
37.	820816104037	KARUTHAMMA P	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
38.	820816104038	KAVIYARASAN S	1	0	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
39.	820816104039	KAYALVIZHI D	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1
40.	820816104040	KAYALVIZHI E	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
41.	820816104041	KEERTHANA B	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0	1	0	1	1	1
42.	820816104042	KIRUBA S	1	1	0	1	1	1	1	0	1	1	0	1	1	0	1	1	0	1	1	1
43.	820816104043	KOWSAKI M	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
44.	820816104045	MADHURABASHINI K	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.	820816104046	MANIMOZHI D	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	0	1	0	1
46.	820816104047	MANISHA M	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1
47.	820816104048	MANJUPARKAVI P	1	0	1	1	1	0	1	1	0	1	0	1	1	1	1	1	0	1	1	1
48.	820816104049	MANOSEELAN G	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1
49.	820816104050	MATHUMATHI R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
50.	820816104051	METHANRAJ S	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
51.	820816104052	MOHAMED IBRAHIMSHAH U	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	1	1	1

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52.	820816104053	MOHAMED SHAIK ALAWUDEEN A	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
53.	820816104054	MONIKA M	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
54.	820816104055	NANDHINI R	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
55.	820816104056	NAVEENAJAGADESWARI D	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0
56.	820816104057	NISHANTHINI G	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
57.	820816104058	NITHESH E	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1
58.	820816104059	NITHYAPRIYA A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
59.	820816104060	NITHYAPRIYA R	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1
60.	820816104061	NIVETHA B	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1
61.	820816104063	PARIMALA S	1	1	1	0	1	1	1	1	0	1	1	1	1	1	0	0	1	1	1	1
62.	820816104064	PARKAVI S	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.	820816104065	PAVITHRA S	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1
64.	820816104066	PRAGATHI J	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1
65.	820816104067	PRAMILA R	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1
66.	820816104068	PRASANTH M	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1
67.	820816104069	PREETHINISH A K	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
68.	820816104070	PRIYA A	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	1
69.	820816104071	PRIYADHARSHINI A	1	1	1	1	0	1	1	0	1	0	1	1	1	0	1	1	1	1	0	1
70.	820816104072	PRIYADHARSHINI M	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
71.	820816104074	PRIYADHARSHINI T	1	1	0	1	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	0
72.	820816104075	PUSHPALATHA P	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1
73.	820816104076	RAJASUNDARI M	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.	[illegible]	RAJESWARI R	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.	[illegible]104078	RAJITHA R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0
76.	[illegible]	RAMEEZ RAJA A	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	0
77.	[illegible]	RAMPRAKASH S	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	0
78.	[illegible]	RAMPRASATH	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1

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		T																				
79.	820816104083	RETHINAKUMARI P	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1
80.	820816104084	ROSHINI G	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1
81.	820816104085	SALOMIYA R	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
82.	820816104086	SANGEETHA J	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
83.	820816104087	SANGEETHA R	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
84.	820816104088	SANTHIYA A	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
85.	820816104089	SANTHIYA G	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0
86.	820816104090	SARANYA S	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
87.	820816104091	SATHANA V	1	1	1	1	0	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1
88.	820816104092	SATHISH S	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
89.	820816104093	SATHYA R	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1
90.	820816104094	SHIBA B	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1
91.	820816104095	SILAMBARASI B	0	1	1	0	1	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1
92.	820816104096	SIVASANGARI K	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1
93.	820816104097	SRILEKA M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
94.	820816104098	STEFFYGRAFF M	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	0
95.	820816104099	SUBA S	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1
96.	820816104100	SUBASHINI R	1	1	0	1	1	1	0	0	1	1	1	0	1	0	1	1	1	1	1	1
97.	820816104101	SUBASHRI T	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
98.	820816104102	SUBASREE P	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
99.	820816104103	SUBASRI S	0	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1
100.	820816104105	SUGANTHI A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
101.	820816104106	SUGUNA G	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0
102.	820816104107	SUMITHA P	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
103.	820816104109	SURYAPRAKASH T	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0
104.	820816104110	TAMIZHMOZHI	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1
105.	820816104113	THASLEEMA	1	1	0	0	1	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1
106.	820816104115	VANMATHEESWARI P	1	1	1	0	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1

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107.	820816104115	VANITHA G	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
108.	820816104116	VARSHA G	0	1	0	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1
109.	820816104117	VARSHINI M	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1
110.	820816104118	VARSHINI V	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
111.	820816104119	VASUMATHI T	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0
112.	820816104120	VENKADESH WARAN S	1	1	1	0	1	0	1	0	1	1	1	1	1	1	0	1	1	0	1
113.	820816104121	VICHITHRA B	1	1	0	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1
114.	820816104122	VIJAYASRI P	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
115.	820816104123	VINOLIYA G	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
116.	820816104125	YOGESWARI A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
117.	820816104126	YUVARAJA P	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1
118.	820816104301	ABINASH P	1	1	0	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	1
119.	820816104302	ARUNKUMAR R	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
120.	820816104309	MAGESHWARI M	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
121.	820816104310	SRIMATHI M	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
122.	820816104701	SINDHUJA R	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
123.	820816104702	THIPAK MANJREKAR K	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	1
TOTAL			110	113	106	96	104	115	116	104	105	106	103	110	107	111	100	110	100	113	102
ATTAINMENT			89	92	86	78	85	93	94	85	85	86	84	89	87	90	81	89	81	92	83
LEVEL OF ATTAINMENT			2 (M)	3 (S)	2 (M)	1 (L)	2 (M)	3(S)	3 (S)	2 (M)	2 (M)	2 (M)	2 (M)	2 (M)	2 (M)	3 (S)	2 (M)	2 (M)	2(M)	3 (S)	2(M)

Attainment level calculation	
>=70%-79%	1 (L)
>=80%-89%	2 (M)
>=90%	3 (S)

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

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DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

Mapping of Course Outcomes Vs Program Outcomes

CO Number	Competency	Cognitive level
CO1	Develop web pages using basic HTML	Understand
CO2	Apply XML techniques in web design	Apply
CO3	Understand Java Scripting Concepts	Understand
CO4	Implement PHP Programs	Apply
CO5	Develop MySQL database connectivity for real world applications	Apply

CO to PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	-	2	2	-	2	-	-	3	3	3
CO2	2	-	-	-	1	-	-	-	-	2	1	-
CO3	-	3	-	2	1	-	-	-	-	-	-	3
CO4	3	3	-	2	2	-	3	-	-	3	3	3
CO5	2	-	-	2	2	-	-	-	-	2	3	3

CO to PSO Mapping

Course Outcome	PSO1	PSO2
CO1	2	3
CO2	-	-
CO3	2	1
CO4	2	3
CO5	1	2

1. Slight(Low) 2. Moderate(Medium) 3.Substantial(High) "-" No Correlation

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HOD/CSE

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DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous)

NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Academic Year : 2018-19 **Batch:** 2016

Name of the Value Added Course: Web Development using PHP & MySQL **Semester:** VI

Student Name: K. Abinaya

Register Number: 820816104003

Staff Handling: S. Aravindhan

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course Content	✓				
2	Skill Development	✓				
3	Motivation		✓			
4	Regularity and Punctuality of teacher	✓				
5	Coverage of syllabus	✓				
6	Interaction	✓				
7	Individual attention		✓			
8	Outcome	✓				
9	Other suggestions	This course was very helpful				

Signature of the student

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Dr. S. RAMABALAN, M.E., Ph.D.,
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Nagapattinam (Dt) Tamil Nadu.

E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous)

NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Academic Year : 2018-19 **Batch:** 2016

Name of the Value Added Course: Web Development Using PHP & My SQL **Semester:** VI

Student Name: A. Priya

Register Number: 820816104070

Staff Handling: K. Balasubramaniyan.

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course Content	✓				
2	Skill Development	✓				
3	Motivation	✓				
4	Regularity and Punctuality of teacher	✓				
5	Coverage of syllabus	✓				
6	Interaction		✓			
7	Individual attention	✓				
8	Outcome	✓				
9	Other suggestions					

A.P.

Signature of the student

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous)

NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Academic Year : 2018-19 **Batch:** 2016

Name of the Value Added Course: Web Development Using PHP & My SQL **Semester:** VI

Student Name: Sathish S.

Register Number: 820816104092

Staff Handling: K. Balasubramaniyan.

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course Content	✓				
2	Skill Development	✓				
3	Motivation	✓				
4	Regularity and Punctuality of teacher	✓				
5	Coverage of syllabus	✓				
6	Interaction		✓			
7	Individual attention	✓				
8	Outcome	✓				
9	Other suggestions	This Course was Satisfactory.				

Signature of the student

ATTESTED

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Nagapattinam (Dt) Tamil Nadu.

E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM
DEPARTMENT OF CSE

COURSE SUMMARY REPORT

1. Title: Web Development using PHP & MSQL
2. Name of Speaker:
    1. Mr.S.Aravindhan
    2. Dr.K.Balasubramanian
3. Speaker Details:
    1. Assistant Professor, CSE Department, EGSPEC.
    2. Associate Professor, CSE Department, EGSPEC.
4. Date of speaker's presentation:
    06.05.2019 – 11.05.2019 & 13.05.2019 – 18.05.2019
5. Duration : 36 Hours
6. Beneficiary Details:
    UG - III CSE Students
7. Coordinators:
    1. Mr.M.Markco (Asst. Prof., CSE., EGSSPEC)
    2. Mr.K.P.Thamaraikannan (Asst. Prof., CSE,EGSPEC)

More about this Course:

The value added course on Web Development using PHP & MSQL is intended to teach students to create web applications using PHP and MySQL. This course provides the knowledge necessary to design and develop dynamic, database-driven web pages using PHP that powers many websites. It originally started out as a way to make dynamic websites by generating html. Because of its roots, it is very easy to insert bits and pieces of PHP inside of standard HTML/XHTML code. Students will be using MySQL which is a popular relational database management system. It is the standard database system available on web hosting sites. Although it works with many different programming languages, it is frequently paired with PHP. Students felt that this course is ver useful for them.

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Nagapattinam (Dt), Tamil Nadu.

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)
OLD NAGORE ROAD, THETHI, NAGAPATTINAM - 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT

Mr./Ms.Kamali S

has successfully completed the value added course on "Web Development using PHP & MYSQL" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 06/05/2019 to 11/05/2019.

ATTESTED
Dr.S.RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagapattinam (Dt) Tamil Nadu

COORDINATORS	HOD/CSE	PRINICIPAL
MR.M.MARKCO	DR.M. CHINNADURAI	DR.S. RAMABALAN
MR.K.P.THAMARAIKANNAN		

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
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OLD NAGORE ROAD, THETHI, NAGAPATTINAM - 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT

Mr./Ms. Ashwin G

has successfully completed the value added course on "Web Development using PHP & MYSQL" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 06/05/2019 to 11/05/2019.

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

COORDINATORS	HOD/CSE	PRINICIPAL
MR.M.MARKCO	DR.M. CHINNADURAI	DR.S. RAMABALAN
MR.K.P.THAMARAIKANNAN		

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT

Mr./Ms. Suguna G

has successfully completed the value added course on "Web Development using PHP & MYSQL" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 13/05/2019 to 18/05/2019.

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

COORDINATORS	HOD/CSE	PRINICIPAL
MR.M.MARKCO	DR.M. CHINNADURAI	DR.S. RAMABALAN
MR.K.P.THAMARAIKANNAN		

5/6

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OLD NAGORE ROAD, THETHI, NAGAPATTINAM - 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT

Mr./Ms. Arunkumar R

has successfully completed the value added course on "Web Development using PHP & MYSQL" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 13/05/2019 to 18/05/2019.

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Dr. S. RAMABALAN, M.E., Ph.D.,
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Nagapattinam (Dt) Tamil Nadu.

COORDINATORS
MR.M.MARKCO
MR.K.P.THAMARAIKANNAN

HOD/CSE
DR.M. CHINNADURAI

PRINICIPAL
DR.S. RAMABALAN

E.G.S. Pillay Engineering College (Autonomous), Nagapattinam

Department Of Computer Science & Engineering

Organized

ONE WEEK
VALUE ADDED COURSE
ON
CLOUD INFRASTRUCTURE AND SERVICES

EGS PILLAY ENGINEERING COLLEGE – NAGAPATTINAM

DEPARTMENT OF CSE

Value Added Course on

"Cloud Infrastructure and Services"

DATE: 03.12.2018 – 08.12.2018

TABLE OF CONTENT

HOD/CSE

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

REQUISITION LETTER

Date: 22.11.2018

From

Dr.T.Ganesan,
Professor/CSE,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

To

The Principal,
E.G.S.Pillay Engineering College,
Nagapattinam.

22/11/18

Through

The Head of Department,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

Respected Sir,

Sub: Value Added Course – Reg

We are happy to inform you that we have planned to organize one week value added course on title **"Cloud Infrastructure and Services"** for UG IV Year CSE Students from 03.12.2018 to 08.12.2018. Herewith, I enclosed name list with batch and session details. Kindly give permission for conducting the value added course.

Thanking you,

yours faithfully,

[Dr.T.Ganesan]

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.
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Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S. Pillay Engineering College,
Nagapattinam - 611 002

1:The ability to apply software engineering principles and practices to design and develop software systems that meet the automation needs of industrial and societal problems.

2: The ability to apply their technical skills and knowledge gained in the fields such as Artificial Intelligence, Data Science, Cloud Computing, Social Network Analysis and Mobile Application development.

PROGRAM OUTCOMES

1: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4: Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an

6: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

COURSE STARTS ON

6 Days

Value Added Course on "Cloud Infrastructure and Services"

Organized by:

Department of Computer Science and Engineering

at

E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade & NBA
Old Nagore Road, Thethi, Nagapattinam - 611002,
Tamil Nadu,India

www.egspec.org | principal@egspec.org | enquiries@egspec.org
+91-4365-251112 | +91-4365-251114

Convenor:

Prof.Dr.M.CHINNADURAI
PROFESSOR & HEAD / CSE

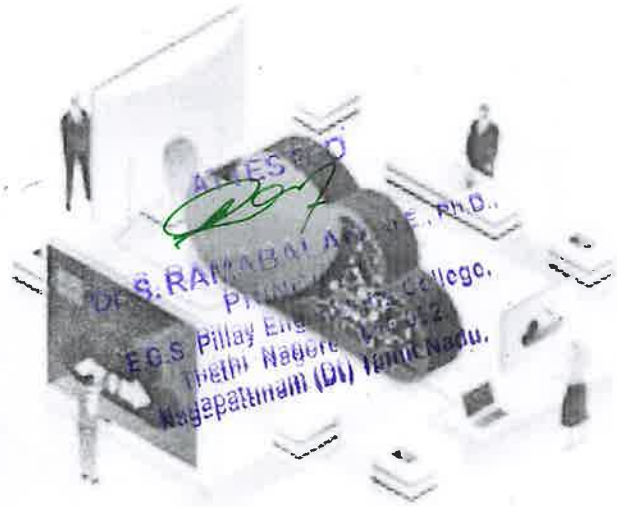
Course Coordinators:

Dr.T.GANESAN
PROFESSOR / CSE
&
Mr.S.ARAVINTHAN
ASSISTANT PROFESSOR / CSE

Resource Person :

Prof.J.NOORUL AMEEN
ASSISTANT PROFESSOR / CSE

Course Duration: **36 hours**



MODULE I:
JOURNEY TO THE CLOUD: Business Drivers for Cloud Computing, Definition of Cloud Computing, Characteristics of Cloud Computing as per NIST, Steps Involved in Transitioning from Classic Data Center to Cloud Computing Environment

MODULE II:
CLASSIC DATA CENTER (CDC): Overview of Classic Data Center, Compute, Storage and Networking, Object Based and Unified Storage Technologies, Business Continuity Overview, Backup, Replication Technologies.

MODULE III:
VIRTUALIZED DATA CENTER (VDC): Compute virtualization, Storage Virtualization, Network Virtualization Techniques, Methods for Implementing Desktop Virtualization, their Benefits, and Considerations, Application Virtualization Methods, Benefits, and Considerations.

MODULE IV:
BUSINESS CONTINUITY IN VIRTUALIZED DATA CENTER: Overview of Business Continuity in Virtualized Data Center, Fault Tolerance Mechanism in Virtualized Data Center, Backup and Recovery of Virtual Machines (VMs), VM Replication and Migration Technologies.

MODULE V:
CLOUD INFRASTRUCTURE AND MANAGEMENT:Cloud Computing Primer, Overview of Cloud Computing, Cloud Services and Deployment Models, Economics of Cloud, Cloud Infrastructure Framework, Infrastructure Management and Service Creation Tools, Cloud Service Management, Cloud Migration Considerations.

COURSE OUTCOMES

1. Explore the basics of cloud computing.
2.Explain the Classic Data Center and its applications.
3. Build a virtualized Data Center using cloud.
4. Manage the Cloud infrastructure and services

Course Overview

This course introduces you to the core concepts of cloud computing. You gain the foundational knowledge required for understanding cloud computing from a business perspective as also for becoming a cloud practitioner. You understand the definition and essential characteristics of cloud computing, its history, the business case for cloud computing, and emerging technology usecases enabled by cloud. We introduce you to some of the prominent service providers of our times (e.g. AWS, Google, IBM, Microsoft, etc.) the services they offer, and look at some case studies of cloud computing across industry verticals.

You learn about the various cloud service models (IaaS, PaaS, SaaS) and deployment models (Public, Private, Hybrid) and the key components of a cloud infrastructure (VMs, Networking, Storage - File, Block, Object, CDN). We also cover emergent cloud trends and practices including - Hybrid Multicloud, Microservices, Serverless, DevOps, Cloud Native and Application Modernization. And we go over the basics of cloud security, monitoring, and different job roles in the cloud industry.

Even though this course does not require any prior cloud computing or programming experience, by the end of the course, you will have gained some hands-on experience by provisioning a cloud service and working with it

E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM.
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

EGSPEC/CSE/UG/VAC/2018-19/01 **Date: 28.11.2018**

CIRCULAR

It is here by informed that Department of Computer Science and Engineering is going to organize a Value Added Course on **"Cloud Infrastructure and Services"** from 03.12.2018 to 08.12.2018 (9.15 am to 4.45 pm) for the duration of 36 hours by, **Prof.Mr.J.NoorulAmeen,** Assistant Professor, Department of Computer Science and Engineering, E.G.S.Pillay Engineering College (Autonomous), Nagapattinam for final year CSE Students. All the final year students are instructed to attend the course without fail.

CONVENER

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DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

HOD/CSE

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E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED

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Nagapattinam (Dt) Tamil Nadu.

E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Value Added Course on *"Cloud Infrastructure and Services"*

PROGRAMME SCHEDULE

BREAK TIMINGS:

S. NO	DAY	DATE	TOPIC
1	DAY 1	03.12.2018	Business Drivers for Cloud Computing, Definition of Cloud Computing, Characteristics of Cloud Computing as per NIST, Steps Involved in Transitioning from Classic Data Center to Cloud Computing Environment
2	DAY 2	04.12.2018	Overview of Classic Data Center, Compute, Storage and Networking, Object Based and Unified Storage Technologies, Business Continuity Overview, Backup, Replication Technologies.
3	DAY 3	05.12.2018	Compute virtualization, Storage Virtualization, Network Virtualization Techniques, Methods for Implementing Desktop Virtualization, their Benefits, and Considerations
4	DAY 4	06.12.2018	Application Virtualization Methods, Benefits, and Considerations.Overview of Business Continuity in Virtualized Data Center, Fault Tolerance Mechanism in Virtualized Data Center, Backup and Recovery of Virtual Machines (VMs).
5	DAY 5	07.12.2018	VM Replication and Migration Technologies.Cloud Computing Primer, Overview of Cloud Computing, Cloud Services and Deployment Models, Economics of Cloud, Cloud Infrastructure Framework, Infrastructure Management and Service Creation Tools
6	DAY 6	08.12.2018	Cloud Service Management, Cloud Migration Considerations Practice Session & Assessment Test

Tea Break : 10:45-11:00 am & 3:30-3:45 pm
Lunch Break: 1:00- 2:00 pm

HoD/CSE

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Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

SYLLABUS

VALUE ADDED COURSE ON CLOUD INFRASTRUCTURE AND SERVICES		
COURSE OBJECTIVES:		
	1. Understand the Phases of Journey to the Cloud.	
	2. Describe the Key Elements of Classic Data Center.	
	3. Understand the Concepts of Virtualized Data Center	
Module I	**JOURNEY TO THE CLOUD**	**7 Hours**
Business Drivers for Cloud Computing, Definition of Cloud Computing, Characteristics of Cloud Computing as per NIST, Steps Involved in Transitioning from Classic Data Center to Cloud Computing Environment		
Module II	**CLASSIC DATA CENTER (CDC)**	**7 Hours**
Overview of Classic Data Center, Compute, Storage and Networking, Object Based and Unified Storage Technologies, Business Continuity Overview, Backup, Replication Technologies.		
Module III	**VIRTUALIZED DATA CENTER (VDC)**	**7 Hours**
Compute virtualization, Storage Virtualization, Network Virtualization Techniques, Methods for Implementing Desktop Virtualization, their Benefits, and Considerations, Application Virtualization Methods, Benefits, and Considerations.		
Module IV	**BUSINESS CONTINUITY IN VIRTUALIZED DATA CENTER**	**7 Hours**
Overview of Business Continuity in Virtualized Data Center, Fault Tolerance Mechanism in Virtualized Data Center, Backup and Recovery of Virtual Machines (VMs), VM Replication and Migration Technologies.		
Module V	**CLOUD INFRASTRUCTURE AND MANAGEMENT**	**8 Hours**
Cloud Computing Primer, Overview of Cloud Computing, Cloud Services and Deployment Models, Economics of Cloud, Cloud Infrastructure Framework, Infrastructure Management and Service Creation Tools, Cloud Service Management, Cloud Migration Considerations		
	Total:	**36 Hours**
FURTHER READING :		
Cloud evolution-VMware Virtualization Tools- Google Infrastructure- Google Cloud Security		
COURSE OUTCOMES:		
	After completion of the course, Student will be able to	
CO1	Explore the basics of cloud computing.	
CO2	Explain the Classic Data Center and its applications.	
CO3	Build a virtualized Data Center using cloud.	
CO4	Manage the Cloud infrastructure and services.	
CO5	Demonstrate the Cloud Migration Considerations	
REFERENCES:		
1. Cloud Infrastructure and Services EMC2 Bangalore Book		
2. Anthony T Velte, Cloud Computing: A practical Approach, Tata McGraw Hill, 2011		
3. Halper Fern, Kaufman Marcia, Bloor Robin, Hurwit Judith, Cloud Computing for Dummies, Wiley India, 2013		

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DEPARTMENT OF CSE

VALUE ADDED COURSE ON

"CLOUD INFRASTRUCTURE AND SERVICES"

ENROLLMENT LIST

S.No	Register Number	Name of Student
1.	820815104001	ABINAYA K
2.	820815104002	ABINAYA R
3.	820815104003	AISHWARYA S
4.	820815104004	AJAY R
5.	820815104005	AKALYA S
6.	820815104006	ANBUKANI A
7.	820815104007	ARAVINTH R
8.	820815104008	ARTHI G
9.	820815104009	ARULMARY A
10.	820815104010	ARUNADEVI P
11.	820815104011	ARUNKUMAR R
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14.	820815104014	DESIGA K
15.	820815104015	DEVI R
16.	820815104016	DHARMAKAVIRAJ B
17.	820815104017	DHEVASENA R M
18.	820815104018	DHIVYA M
19.	820815104019	DHIVYABARATHI M
20.	820815104020	DIVYA M
21.	820815104021	ELAKKIA G
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44.	820815104045	MEENA T
45.	820815104046	MOHAMED [illegible]
46.	820815104048	NATARAJAN A
47.	820815104049	NIVEDHA K

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48.	820815104050	NIVETHA N
49.	820815104051	OVIYA K
50.	820815104052	PAVITHRA R
51.	820815104053	PREETHI B
52.	820815104054	PREETHI S
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83.	820815104088	VINITHA V
84.	820815104089	VINODHINI T
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86.	820815104301	KALAIMOZHI S
87.	820815104302	KATHIRAVAN P
88.	820815104303	NIRMANRAJAN T
89.	820815104304	RATHISH R
90.	820815104305	SANDHIYA L
91.	820815104306	SRIDEVI R
92.	820815104307	SURYA V
93.	820815104501	ANURADHA.B
94.	820815104701	ABINAYA P
95.	820815104702	KIRUTHIKA B

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E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(Academic Year: 2018-2019)

VALUE ADDED COURSE ON "CLOUD INFRASTRUCTURE AND SERVICES"

STUDENT ATTENDANCE SHEET

Date : 03.12.2018 – 08.12.2018

S.No	Register Number	Name of Student	03.12.18		04.12.18		05.12.18		06.12.18		07.12.18		08.12.18	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	820815104001	ABINAYA K	/	/	/	/	/	/	/	/	/	/	/	/
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21.	820815104021	ELAKKIA G													
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52.	820815104054	PREETHI S													
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83.	820815104088	VINITHA V	/	/	/	/	/	/	/	/	a	a	/	/
84.	820815104089	VINODHINI T	/	/	/	/	/	/	/	/	/	/	/	/
85.	820815104090	YAMUNA R	/	/	/	/	/	/	/	/	/	/	/	/
86.	820815104301	KALAIMOZHI S	/	/	/	/	/	/	/	/	/	/	/	/
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94.	820815104701	ABINAYA P	/	/	/	/	/	/	/	/	/	/	/	/
95.	820815104702	KIRUTHIKA B	/	/	/	/	/	/	/	/	/	/	/	/
		Total Present	94	94	90	90	93	93	95	95	91	91	95	95
		Total Absent	01	01	05	05	2	2	—	—	04	04	—	—
		Course Coordinator Signature												

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MATERIAL
MODULE – 1
JOURNEY TO THE CLOUD

Cloud Computing

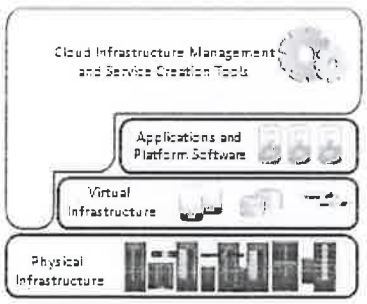
A model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., servers, storage, networks, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

• Essential Cloud Characteristics

- On-demand self-service
- Broad network access
- Resource pooling
- Rapid elasticityMeasured service
- BuildingCloud Infrastructure

An infrastructure should fulfill the essential characteristics to support Cloud services. It can be built using a shared pool of computing resources, such as compute, storage, and network. The infrastructure should be flexible to meet the rapidly-changing demands of its consumers and allow them to provision resources on-demand over a network. The infrastructure should also enable monitoring , control and optimization of resource usage.

Building a Cloud infrastructure is a phased approach. The journey begins with understanding the existing physical infrastructure, its elements, and processes. The next step is to focus on aggregating the existing infrastructure resources using virtualization technologies. These resource pools facilitate centralized management of resources and enables faster resource provisioning.



The next step is to deploy service management tools that enable automation of processes and management to minimize human intervention. Service management tools also include measured services which enable consumption based metering. With the service management in place, on-demand provisioning of IT resources become more dynamic and allow IT to be delivered as a service.

Although virtualization is a key step towards building Cloud, it is possible to use highly automated physical infrastructure to provide Cloud services. However, it may not be optimized.

Virtualize the Infrastructure

• Virtualization is a technique of abstracting physical resources and making them appear as logical resources

• Virtualization may be implemented at compute, storage, network, and/or application layers Refers to as a Virtualized Data Center (VDC)

Virtualization Benefits:
Optimizes utilization of IT infrastructure
Reduces cost and management complexity
Reduces deployment time
Increases flexibility

Virtualization abstracts physical resources, such as compute, storage, and network, to function as logical resources. It creates an abstraction layer to hide the physical characteristics of resources from users. For example, in compute system virtualization, a physical machine appears as multiple logical machines (virtual machines), each running an operating system concurrently.

A VDC is a data center in which compute, storage, network, and/or applications are virtualized. Compute virtualization enables running multiple operating systems concurrently on a compute system. This improves compute system utilization. Storage virtualization provides a logical view of storage and presents it to the compute system. In network virtualization, multiple logical networks are created on a physical network. Each of these virtualization technologies is explained in detail in the forthcoming modules.

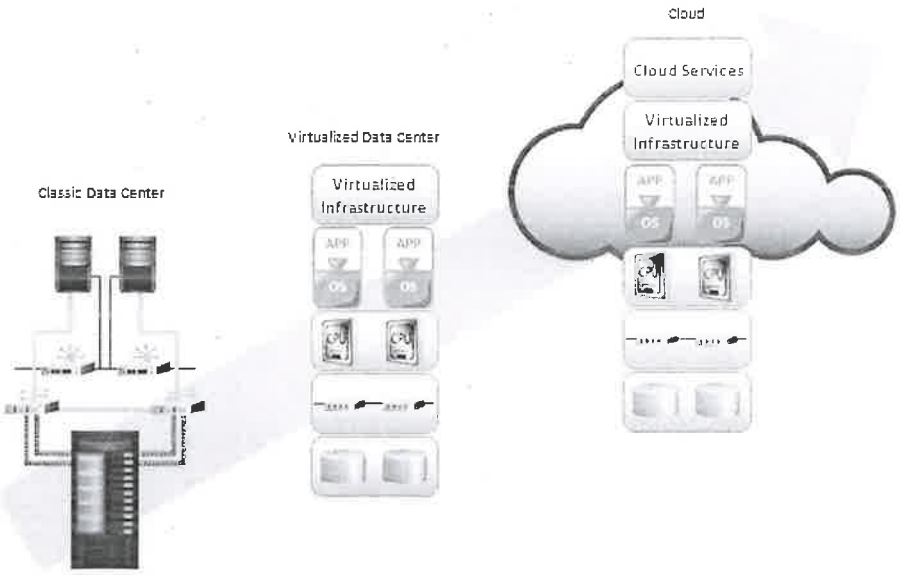
By consolidating IT resources using virtualization techniques, organizations can optimize their infrastructure utilization. By improving the utilization of IT assets, organizations can reduce the costs associated with purchasing new hardware. They also reduce space and energy costs associated with maintaining the resources. Moreover, less people are required to administer these resources, which further lowers the cost. Virtual resources are created using software that enables faster deployment, compared to deploying physical resources. Virtualization increases flexibility by allowing to create and reclaim the logical resources based on business requirements.

A service management tool enables creation and optimization of Cloud services to meet business objectives and to provide value to the consumers. The services built are listed in a service catalog that allows consumers to choose the desired services. Service management automates service creation and provisioning without any manual intervention. It also helps the monitoring and metering services in measuring resource usage and chargeback. Service management tools are also responsible for managing both physical and virtual resources that are used to create Cloud services. Examples of management activities are capacity management, configuration management, change management, etc. These management processes enable meeting service assurance and compliance requirements.

A Classic Data Center (CDC) is a facility that enables IT resources to process data. The core elements of CDC are compute, storage, network, application, and Database Management System (DBMS).

- **Application** is a computer program that provides the logic for computing operations. Applications may use a DBMS, which uses operating system services, to perform store/retrieve operations on storage devices.
- **DBMS** provides a structured way to store data in logically organized tables that are interrelated. A DBMS optimizes the storage and retrieval of data.

Journey to the Cloud – A Phased Approach



- **Compute** is a resource that runs applications with the help of underlying computing components.
- **Storage** is a resource that stores data persistently for subsequent use.
- **Network** is a data path that facilitates communication between compute systems or between compute systems and storage.

These IT resources are typically viewed and managed as separate entities. But all these elements must work together to address data processing requirements. Other elements of a CDC are power supplies and environmental controls such as air conditioning and fire suppression.

As discussed, Cloud adoption for an organization is a journey. Organizations have to perform various steps to elevate their existing data centers, to provide Cloud services.

Data centers provide centralized digital data-processing capabilities required to support an organization's business. A typical data center includes compute, storage, and network, which enable storing and processing large amounts of data. These data centers are also referred as Classic Data Centers (CDCs). In a Classic data center, resources are typically dedicated for each of the business units or applications . This leads to complex management and underutilization of resources. The limitations of CDC resulted in the emergence of Virtualized Data Centers (VDCs).

Continuous cost pressure on IT and on-demand data processing requirement of businesses have resulted in the emergence of Cloud computing. This course takes the same approach, starts with discussion on classic data center environment and then describes virtualization at each layer; compute, storage, network and desktop/application along with business continuity in a VDC. This virtualized data center forms the basis for understanding further discussion on Cloud infrastructure, service management, security and migration.

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VALUE ADDED COURSE ON "CLOUD INFRASTRUCTURE AND SERVICES"

FROM 03/12/2018 TO 08/12/2018

Assessment Questions

Date : 08.12.2018 **Batch: 2015-2019**

Time: 03:30 PM to 04:30 PM **Maximum Marks:** 20 Marks

Multiple Choice Questions (20*1 = 20)

1. Which tool helps to create Cloud services?
   a. Service management tool
   b. Service creation tool
   c. Service monitoring tool
   d. Service planning tool

2. Which key requirement of a data center refers to the ability of IT to support new business initiatives dynamically?
   a. Manageability
   b. Availability
   c. Capacity
   d. Flexibility

3. Which are the key parameters that determine the performance and availability of a RAID set?
   a. Number of drives in a RAID set and RAID level
   b. Number of drives in a RAID set and the capacity of each drive
   c. Number of RAID controllers and type of RAID implementation
   d. Number of drives in a RAID set and Type of RAID implementation

4. Which key requirement of a data center is violated when an authorized storage administrator is not able to remotely login to a server in the data center?
   a. Scalability
   b. Flexibility
   c. Security
   d. Availability

5. What is stored in virtual machine log file?
   a. Information of virtual machine's activities
   b. Virtual machine's RAM contents
   c. Virtual machine BIOS information
   d. Information of virtual machine's configuration

6. What is used to create secondary cache in cache tiering mechanism?
   a. DRAM
   b. FC drive
   c. Solid state drive
   d. SATA drive

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7. When is thin LUN preferred over traditional LUN?
    a. Performance is predominant
    b. Security is more important
    c. Storage space efficiency is paramount
    d. High availability is predominant

8. What defines the minimum amount of physical storage allocated at a time to a thin LUN from a thin Pool?
    a. Thin LUN extent
    b. Thin LUN capacity
    c. Thin LUN factor
    d. Thin LUN set size

9. Which is a benefit of network virtualization?
    a. Enhanced storm control
    b. Increased resource acquisition
    c. Improved manageability
    d. Better policy control

10. What correctly describes application virtualization?
    a. Encapsulates operating system resources and the application
    b. Increases application and CPU utilization
    c. Provides interoperability between different application versions
    d. Breaks dependencies between application interface and processing logic

11. What is true about application encapsulation?
    a. Requires a locally installed agent on the client machine
    b. Requires a built-in agent at the remote server
    c. Does not rely on software installation or underlying OS
    d. Requires a locally installed agent on the client machine and a built–in agent

12. What is true about application streaming?
    a. Requires no agent at client machine
    b. Requires a locally installed agent on the client machine and a built–in agent on the application
    c. Requires a locally installed agent on the client machine
    d. All the data is delivered to the client after application starts

13. When is a connection broker a mandatory component of Virtual Desktop Infrastructure architecture?
    a. Desktop VMs are assigned from VM pool
    b. High-end graphic applications are used
    c. Additional security is required
    d. Dedicated desktop VM is assigned to each user

14. What is the Cloud service model offered by Cloud Foundry?
    a. Software-as-a-Service
    b. Platform-as-a-Service
    c. Infrastructure-as-a-Service
    d. Virtualization-as-a-Service

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15. What correctly describes the state of virtual disks of a virtual machine after an array-to-array migration is performed?
    a. Virtual disks are maintained at both source and target arrays
    b. Virtual disks are only maintained at the source array
    c. Virtual disks are deleted from the source array after they are copied to the target array
    d. Virtual disks are deleted from both source and target arrays

16. Which is used as a master copy to create and provision a new virtual machine (VM)?
    a. VM template
    b. VM snapshot
    c. VM clone
    d. VM backup

17. Which is a component of virtual infrastructure in Cloud?
    a. Management software
    b. Storage array
    c. Network identity pool
    d. Service catalog

18. Which option best describes 'resource bundling' in Cloud service creation procedure?
    a. Bundling application, platform software, and migration tools
    b. Integrating virtual machine, virtual network, and virtual volume
    c. Bundling graded compute, network, and application services
    d. Integrating graded compute, network, and storage pools

19. Which is a key activity in 'problem management'?
    a. Rectifying error to return Cloud services as quickly as possible
    b. Analyzing incident history to identify impending service failures
    c. Checking veracity of problem records in CMDB
    d. Transferring problem history to incident management

20. Which Cloud service management process is responsible for optimizing utilization of IT resources?
    a. Service asset and configuration management
    b. Financial management
    c. Compliance management
    d. Capacity management

Answers:

1	2	3	4	5	6	7	8	9	10
a	d	a	d	a	c	c	a	c	d
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
c	c	a	b	c	a	b	d	a	d

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E.G.S. PILLAY ENGINEERING COLLEGE, NAGAPATTINAM
DEPARTMENT OF CSE

VALUE ADDED COURSE ON "CLOUD INFRASTRUCTURE AND SERVICES"

FROM 03/12/2018 TO 08/12/2018

Assessment Questions

Date : 08.12.2018 **Batch: 2015-2019**

Time: 03:30 PM to 04:30 PM **Maximum Marks:** 20 Marks

Multiple Choice Questions (20*1 = 20)

1. Which tool helps to create Cloud services?
   a. Service management tool
   b. Service creation tool
   c. Service monitoring tool
   d. Service planning tool

2. Which key requirement of a data center refers to the ability of IT to support new business initiatives dynamically?
   a. Manageability
   b. Availability
   c. Capacity
   d. Flexibility

3. Which are the key parameters that determine the performance and availability of a RAID set?
   a. Number of drives in a RAID set and RAID level
   b. Number of drives in a RAID set and the capacity of each drive
   c. Number of RAID controllers and type of RAID implementation
   d. Number of drives in a RAID set and Type of RAID implementation

4. Which key requirement of a data center is violated when an authorized storage administrator is not able to remotely login to a server in the data center?
   a. Scalability
   b. Flexibility
   c. Security
   d. Availability

5. What is stored in virtual machine log file?
   a. Information of virtual machine's activities
   b. Virtual machine's RAM contents
   c. Virtual machine BIOS information
   d. Information of virtual machine's configuration

6. What is used to create secondary cache in cache tiering mechanism?
   a. DRAM
   b. FC drive
   c. Solid state drive
   d. SATA drive

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7. When is thin LUN preferred over traditional LUN?
   a. Performance is predominant
   b. Security is more important
   c. Storage space efficiency is paramount
   d. High availability is predominant

8. What defines the minimum amount of physical storage allocated at a time to a thin LUN from a thin Pool?
   a. Thin LUN extent
   b. Thin LUN capacity
   c. Thin LUN factor
   d. Thin LUN set size

9. Which is a benefit of network virtualization?
   a. Enhanced storm control
   b. Increased resource acquisition
   c. Improved manageability
   d. Better policy control

10. What correctly describes application virtualization?
   a. Encapsulates operating system resources and the application
   b. Increases application and CPU utilization
   c. Provides interoperability between different application versions
   d. Breaks dependencies between application interface and processing logic

11. What is true about application encapsulation?
   a. Requires a locally installed agent on the client machine
   b. Requires a built-in agent at the remote server
   c. Does not rely on software installation or underlying OS
   d. Requires a locally installed agent on the client machine and a built–in agent

12. What is true about application streaming?
   a. Requires no agent at client machine
   b. Requires a locally installed agent on the client machine and a built–in agent on the application
   c. Requires a locally installed agent on the client machine
   d. All the data is delivered to the client after application starts

13. When is a connection broker a mandatory component of Virtual Desktop Infrastructure architecture?
   a. Desktop VMs are assigned from VM pool
   b. High-end graphic applications are used
   c. Additional security is required
   d. Dedicated desktop VM is assigned to each user

14. What is the Cloud service model offered by Cloud Foundry?
   a. Software-as-a-Service
   b. Platform-as-a-Service
   c. Infrastructure-as-a-Service
   d. Virtualization-as-a-Service

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15. What correctly describes the state of virtual disks of a virtual machine after an array-to-array migration is performed?
    a. Virtual disks are maintained at both source and target arrays
    b. Virtual disks are only maintained at the source array
    c. Virtual disks are deleted from the source array after they are copied to the target array
    d. Virtual disks are deleted from both source and target arrays

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    b. VM snapshot
    c. VM clone
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    c. Compliance management
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EGS Pillay Engineering College, Nagapattinam			
Department of CSE			
Academic Year : 2018-2019			
Value added course on Cloud Infrastructure and Services			
Batch: 2015-2019			
Mark Sheet			
S. No	Register Number	Name	Marks
1.	820815104001	ABINAYA K	19
2.	820815104002	ABINAYA R	17
3.	820815104003	AISHWARYA S	18
4.	820815104004	AJAY R	19
5.	820815104005	AKALYA S	19
6.	820815104006	ANBUKANI A	16
7.	820815104007	ARAVINTH R	17
8.	820815104008	ARTHI G	18
9.	820815104009	ARULMARY A	19
10.	820815104010	ARUNADEVI P	18
11.	820815104011	ARUNKUMAR R	16
12.	820815104012	BHUVANESHWARI R	15
13.	820815104013	DEEPIKA S	18
14.	820815104014	DESIGA K	20
15.	820815104015	DEVI R	15
16.	820815104016	DHARMAKAVIRAJ B	17
17.	820815104017	DHEVASENA R M	15
18.	820815104018	DHIVYA M	17
19.	820815104019	DHIVYABARATHI M	17
20.	820815104020	DIVYA M	18
21.	820815104021	ELAKKIA G	19
22.	820815104022	GEETHA R	19
23.	820815104023	GOWRI C	17
24.	820815104024	GUNACHITRA G	18
25.	820815104025	HADJINISA M	17
26.	820815104026	HAMEEDSULTHANMARICAR M	18
27.	820815104027	INDIRA N	17
28.	820815104028	JANARTHANAM V	18
29.	820815104030	KALAIYARASI K	19
30.	820815104031	KARTHI L	17
31.	820815104032	KARTHIKA M	18
32.	820815104033	KARTHIKA S	18
33.	820815104034	KARTHIKAYANI S	16
34.	820815104035	KAVASHKAR S	18
35.	820815104036	KAVIYAZHAGAN G	18
36.	820815104037	KOWSALYA S	18

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37.	820815104038	LAVANYA M	19
38.	820815104039	MAHALAKSHMI R	15
39.	820815104040	MAHALAKSHMI R	16
40.	820815104041	MAHESWARI S	19
41.	820815104042	MANGAIYARKARASI G	16
42.	820815104043	MANIKANDAN P	17
43.	820815104044	MATHANNARAYANANSAMY P	16
44.	820815104045	MEENA T	17
45.	820815104046	MOHAMED FAISAL R	20
46.	820815104048	NATARAJAN A	17
47.	820815104049	NIVEDHA K	17
48.	820815104050	NIVETHA N	19
49.	820815104051	OVIYA K	19
50.	820815104052	PAVITHRA R	18
51.	820815104053	PREETHI B	15
52.	820815104054	PREETHI S	18
53.	820815104055	PRIADHARSHINI S	19
54.	820815104056	PRIYADHARSHINI P	15
55.	820815104057	PRIYADHARSINI R	18
56.	820815104058	PRIYANGA C	15
57.	820815104059	RAGARANJANI R	17
58.	820815104060	RAJALAKSHMI G	18
59.	820815104062	SABITHA S	18
60.	820815104063	SAJEE C	16
61.	820815104064	SAKTHIVEL C	19
62.	820815104065	SANDHIYA S	16
63.	820815104066	SANGAVI K	19
64.	820815104067	SANGEETHA M	17
65.	820815104068	SARAVANAN M	18
66.	820815104069	SARGUNAM T	17
67.	820815104070	SATTIYALAKSHMI M	19
68.	820815104072	SINDHUJA J	19
69.	820815104073	SIVA T	18
70.	820815104074	SIVADHARANI R	17
71.	820815104075	SIVATHANUSU P	18
72.	820815104076	SOBIKA R	19
73.	820815104077	SRIRAM M	15
74.	820815104078	SUBASRI T	16
75.	820815104079	SUVITHAN V	15
76.	820815104080	SWATHI P	18
77.	820815104081	SWATHI S	18
78.	820815104082	THAMIZHSELVI T	15
79.	820815104084	THENDRAL B	16
80.	820815104085	THIRIPURASUNDARI M	19

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81.	820815104086	UMA V	18
82.	820815104087	VIJI R	15
83.	820815104088	VINITHA V	16
84.	820815104089	VINODHINI T	19
85.	820815104090	YAMUNA R	16
86.	820815104301	KALAIMOZHI S	19
87.	820815104302	KATHIRAVAN P	16
88.	820815104303	NIRMANRAJAN T	17
89.	820815104304	RATHISH R	15
90.	820815104305	SANDHIYA L	17
91.	820815104306	SRIDEVI R	19
92.	820815104307	SURYA V	17
93.	820815104501	ANURADHA.B	17
94.	820815104701	ABINAYA P	16
95.	820815104702	KIRUTHIKA B	16

Coordinators

HOD/CSE

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Value Added Course on "Cloud Infrastructure & Services"

Impact analysis report

UG Batch: 2015-2019

S.NO	REGISTER No	STUDENT NAME	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1.	820815104001	ABINAYA K	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
2.	820815104002	ABINAYA R	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1
3.	820815104003	AISHWARYA S	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
4.	820815104004	AJAY R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
5.	820815104005	AKALYA S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
6.	820815104006	ANBUKANI A	1	1	1	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	0
7.	820815104007	ARAVINTH R	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1
8.	820815104008	ARTHI G	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
9.	820815104009	ARULMARY A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
10.	820815104010	ARUNADEVI P	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
11.	820815104011	ARUNKUMAR R	1	1	1	1	0	1	1	0	1	1	1	1	1	0	1	1	0	1	1	1
12.	820815104012	BHUVANESHWARI R	0	1	1	0	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1
13.	820815104013	DEEPIKA S	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1
14.	820815104014	DESIGA K	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.	820815104015	DEVI R	1	1	1	0	0	1	1	1	1	0	1	1	1	1	0	1	1	1	1	0
16.	820815104016	DHARMAKAVIRAJ B	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1
17.	820815104017	DHEVASENA R M	1	1	0	1	1	1	1	0	1	0	0	1	1	1	1	0	1	1	1	1
18.	820815104018	DHIVYA M	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0
19.	820815104019	DHIVYABARATHI M	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1
20.	820815104020	DIVYA M	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1
21.	820815104021	ELAKKIA G	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
22.	820815104022	GEETHA R	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
23.	820815104023	GOWRI C	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1
24.	820815104024	GOWTHAMCHITRA G	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
25.	820815104025	HAJIANISA M	1	1	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1
26.	820815104026	HAMEEDSULTHANMARICAR M	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1
27.	820815104027	INDIRA N	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1

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28.	820815104028	JANARTHANAM V	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1
29.	820815104030	KALAIYARASI K	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
30.	820815104031	KARTHI L	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1
31.	820815104032	KARTHIKA M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1
32.	820815104033	KARTHIKA S	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
33.	820815104034	KARTHIKAYANI S	1	1	1	1	0	1	1	0	1	1	1	1	1	0	1	1	0	1	1	1
34.	820815104035	KAVASHKAR S	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
35.	820815104036	KAVIYAZHAGAN G	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1
36.	820815104037	KOWSALYA S	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1
37.	820815104038	LAVANYA M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
38.	820815104039	MAHALAKSHMI R	1	0	1	0	0	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1
39.	820815104040	MAHALAKSHMI R	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	1	1	0
40.	820815104041	MAHESWARI S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
41.	820815104042	MANGAIYARKARASI G	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1
42.	820815104043	MANIKANDAN P	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1
43.	820815104044	MATHANNARAYANANSAMY P	1	0	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1
44.	820815104045	MEENA T	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1
45.	820815104046	MOHAMED FAISAL R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.	820815104048	NATARAJAN A	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1
47.	820815104049	NIVEDHA K	1	0	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1
48.	820815104050	NIVETHA N	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
49.	820815104051	OVIYA K	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
50.	820815104052	PAVITHRA R	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
51.	820815104053	PREETHI B	1	1	1	1	1	0	0	0	1	1	1	0	1	0	1	1	1	1	1	1
52.	820815104054	PREETHI S	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
53.	820815104055	PRIADHARSHINI S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
54.	820815104056	PRIYADHARSHINI P	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	1
55.	820815104057	PRIYADHARSHINI R	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0
56.	820815104058	PRIYOGA C	1	0	1	1	0	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1
57.	820815104061	RAGAVARAJANI R	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1
58.	820815104060	RAJALAKSHMI G	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1
59.	820815104062	SABITHA S	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1

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60.	820815104063	SAJEE C	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1
61.	820815104064	SAKTHIVEL C	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.	820815104065	SANDHIYA S	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1
63.	820815104066	SANGAVI K	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
64.	820815104067	SANGEETHA M	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1
65.	820815104068	SARAVANAN M	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1
66.	820815104069	SARGUNAM T	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1
67.	820815104070	SATTIYALAKSHMI M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
68.	820815104072	SINDHUJA J	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
69.	820815104073	SIVA T	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
70.	820815104074	SIVADHARANI R	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
71.	820815104075	SIVATHANUSU P	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
72.	820815104076	SOBIKA R	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
73.	820815104077	SRIRAM M	0	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	0
74.	820815104078	SUBASRI T	1	1	0	1	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1
75.	820815104079	SUVITHAN V	1	1	0	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	1	0
76.	820815104080	SWATHI P	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0
77.	820815104081	SWATHI S	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0
78.	820815104082	THAMIZHSELVI T	1	1	0	1	0	0	1	0	1	1	1	1	1	1	1	1	0	1	1	1
79.	820815104084	THENDRAL B	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1
80.	820815104085	THIRIPURASUNDARI M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
81.	820815104086	UMA V	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
82.	820815104087	VIJI R	0	0	1	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1
83.	820815104088	VINITHA V	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	0
84.	820815104089	VINODHINI T	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
85.	820815104090	YAMUNA R	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0
86.	820815104091	YUVASRI S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
87.	820815104092	ZATHIRAVAN P	1	1	1	1	0	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1
88.	820815104093	ZIKRAN RAJAN T	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
89.	820815104094	ZRATHISH B	1	1	0	1	1	1	1	0	1	1	1	1	1	0	0	0	1	1	1	1
90.	820815104305	SANDHIYA L	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1
91.	820815104306	SRIDEVI R	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ATTESTED
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92.	820815104307	SURYA V	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1
93.	820815104501	ANURADHA B	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1
94.	820815104701	ABINAYA P	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0
95.	820815104702	KIRUTHIKA B	1	1	1	0	1	1	1	0	1	1	0	1	1	1	0	1	1	1	1	1
		TOTAL	88	87	82	74	75	87	89	77	85	77	78	90	87	85	74	86	79	88	80	80
		ATTAINMENT	93	92	86	78	79	92	94	81	89	81	82	95	92	89	78	91	83	93	84	84
		LEVEL OF ATTAINMENT	3 (S)	3 (S)	2 (M)	1 (L)	1 (L)	3 (S)	3 (S)	2 (M)	2 (M)	2 (M)	2 (M)	3 (S)	3 (S)	2 (M)	1 (L)	3 (S)	2 (M)	3 (S)	2 (M)	2 (M)

Attainment level calculation	
>=70%-79%	1 (L)
>=80%-89%	2 (M)
>=90%	3 (S)

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DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

Mapping of Course Outcomes Vs Program Outcomes

CO NO	Competency	Cognitive level
CO1	Explore the basics of cloud computing.	Understand
CO2	Explain the Classic Data Center and its applications.	Understand
CO3	Build a virtualized Data Center using cloud.	Apply
CO4	Manage the Cloud infrastructure and services.	Apply
CO5	Demonstrate the Cloud Migration Considerations	Apply

CO to PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	-	2	-	-	-	-	-	1	3
CO2	3	3	3	1	-	-	-	-	-	-	2	-
CO3	2	2	-	2	3	-	-	-	-	-	2	2
CO4	3	2	-	3	3	-	-	-	-	-	-	-
CO5	2	3	3	3	-	-	-	-	-	-	3	3

CO to PSO Mapping

Course Outcome	PSO1	PSO2
CO1	-	1
CO2	-	1
CO3	-	3
CO4	-	3
CO5	-	1

1. Slight(Low) 2. Moderate(Medium) 3.Substantial(High) "-" No Correlation

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E.G.S.P. Engineering College
Nagapattinam - 611 002

ATTESTED
Dr. S. RAMABALAN M.E., Ph.D.,
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E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous)

NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Academic Year : 2018 – 2019 **Batch:** 2015–2019

Name of the Value Added Course: Cloud Infrastructure & Services **Semester:**

Student Name: K. Desiga

Register Number: 820815104014

Staff Handling: J. Noorul Ameen

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course Content	✓				
2	Skill Development	✓				
3	Motivation	✓				
4	Regularity and Punctuality of teacher	✓				
5	Coverage of syllabus	✓				
6	Interaction		✓			
7	Individual attention		✓			
8	Outcome	✓				
9	Other suggestions	The Session was Very Intresting				

K. Desiga

Signature of the student

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu

E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM
DEPARTMENT OF CSE

COURSE SUMMARY REPORT

1. Title: Cloud Infrastructure and Services
2. Name of Speaker: Mr.J.Noorul Ameen
3. Speaker Details: Assistant Professor, CSE Department, EGSPEC.
4. Date of speaker's presentation: 03.12.2018 – 08.12.2018
5. Duration : 36 Hours
6. Beneficiary Details: UG – IV YEAR CSE Students
7. Coordinators:
    1. Dr.T.Ganesan (Prof., CSE., EGSSPEC)
    2. Mr.S.Aravindhan (Asst. Prof., CSE,EGSPEC)

More about this Course:

The Cloud Infrastructure and Services (CIS) course educates participants about cloud deployment and service models, cloud infrastructure, and the key considerations in migrating to cloud computing. The course covers technologies required to build classic (traditional), virtualized, and cloud data center environments. These technologies include compute, storage, networking, desktop and application virtualization. Additional areas of focus include backup/recovery, business continuity, security, and management. Students learnt about the key considerations and steps involved in transitioning from the current state of their data center to a cloud computing environment. Upon completing this course, students will have the knowledge to make informed decisions about migrating to cloud infrastructure and choosing the best deployment model for their organization.

ATTESTED
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E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)
OLD NAGORE ROAD, THETHI, NAGAPATTINAM - 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Certificate of Completion

This is to certify that

Mr./Ms. Karthika M

has successfully completed the value added course on **"Cloud Infrastructure and Services"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 03/12/2018 to 08/12/2018.

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagapattinam (Dt), Tamil Nadu.

COORDINATOR
DR.T.GANESAN

HOD/ CSE
DR.M.CHINNADURAI

PRINCIPAL
DR.S.RAMABALAN

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OLD NAGORE ROAD, THETHI, NAGAPATTINAM - 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Certificate of Completion

This is to certify that

Mr./Ms. Kowsalya S

has successfully completed the value added course on **"Cloud Infrastructure and Services"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 03/12/2018 to 08/12/2018.

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Dr. S. RAMABALAN, M.E., Ph.D.,
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Nagapattinam (Dt) Tamil Nadu.

COORDINATOR
DR.T.GANESAN

HOD/ CSE
DR.M.CHINNADURAI

PRINCIPAL
DR.S.RAMABALAN

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Certificate of Completion

This is to certify that

Mr./Ms. Kathiravan P

has successfully completed the value added course on **"Cloud Infrastructure and Services"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 03/12/2018 to 08/12/2018.

ATTESTED
Dr. S. RAMABALAN, M.E., Ph.D.,
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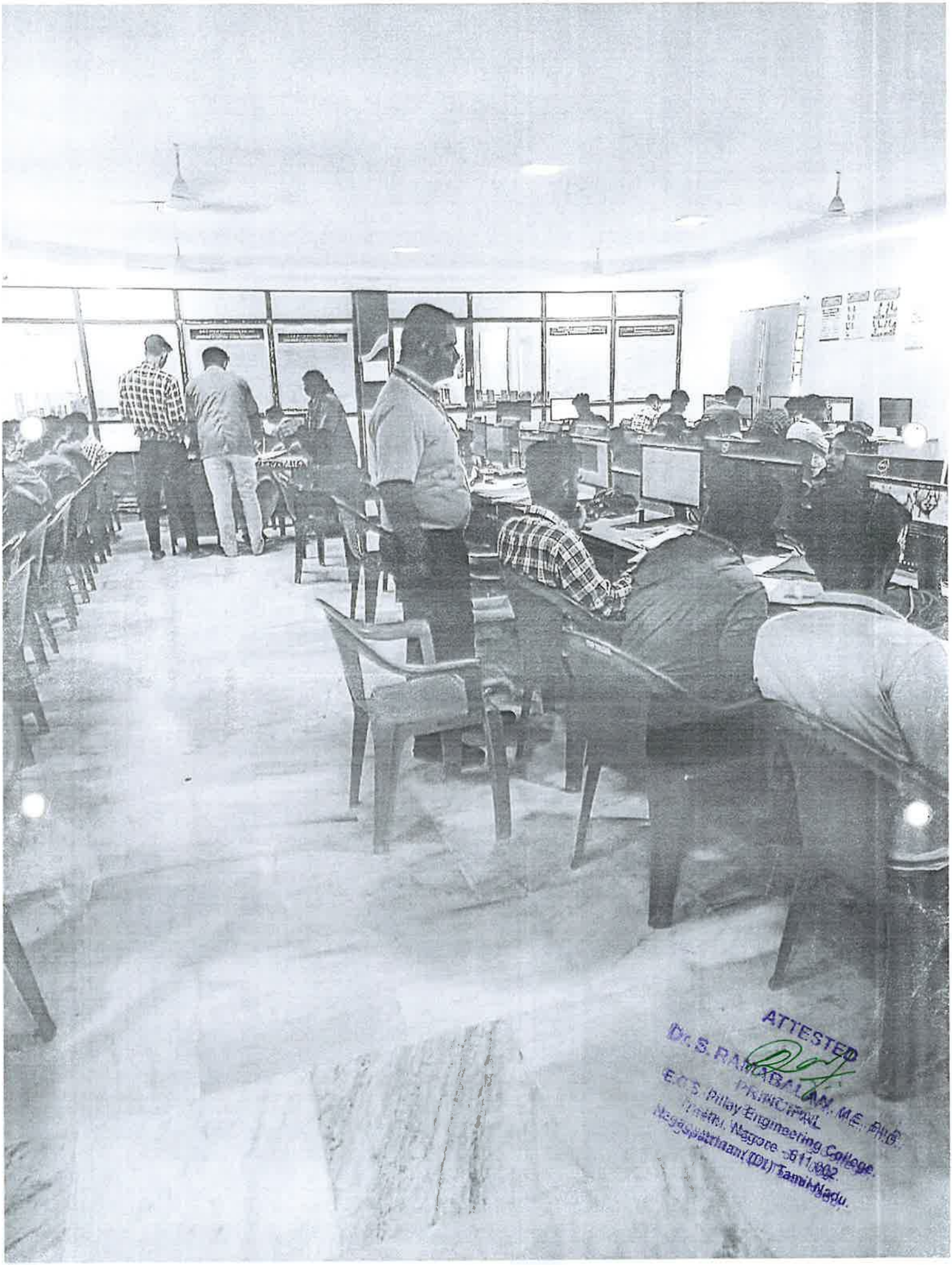
Nagapattinam (Dt) Tamil Nadu.

COORDINATOR
DR.T.GANESAN

HOD/ CSE
DR.M.CHINNADURAI

PRINCIPAL
DR.S.RAMABALAN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Dr.S.RAJABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Nagapattinam (Dt.) Tamil Nadu.

E.G.S. Pillay Engineering College (Autonomous), Nagapattinam

Department Of Computer Science & Engineering

Organized

ONE WEEK
VALUE ADDED COURSE
ON
ANALYSIS OF CRYPTOLOGY TECHNIQUES & ALGORITHMS

[Date : 13.05.2019 – 18.05.2019]

Convenor

Dr.M.Chinnadurai, PROF/HOD – CSE, EGSPEC

Coordinator

Dr.K.Balasubramanian, ASP – CSE, EGSPEC

EGS PILLAY ENGINEERING COLLEGE – NAGAPATTINAM

DEPARTMENT OF CSE

Value Added Course on

"Analysis of Cryptology Techniques & Algorithms"

DATE: 13.05.2019 – 18.05.2019

TABLE OF CONTENT

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

HOD/CSE
HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College
Nagapattinam - 611 002

REQUISITION LETTER

Date. 03.05.2019

From

Dr.K.Balasubramanian,
Associate Professor/CSE,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

To

The Principal,
E.G.S.Pillay Engineering College,
Nagapattinam.

3/5/19

Through

The Head of Department,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

Respected Sir,

Sub: Value Added Course – Reg

We are happy to inform you that we have planned to organize one week value added course title on **"Analysis of Cryptology Techniques & Algorithms"** for PG CSE Students from 13.05.2019 to 18.05.2019. Herewith, I have enclosed name list and session details. Kindly give permission for conducting value added course.

Thanking you,

yours faithfully,

[Dr.K.Balasubramanian]

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt), Tamil Nadu.

Convenor:

Prof.Dr.M.CHINNADURAI
Professor & Head
CSE

Course Coordinator:

Dr.K.BALASUBRAMANIYAN
Associate Professor
CSE

Resource Person:

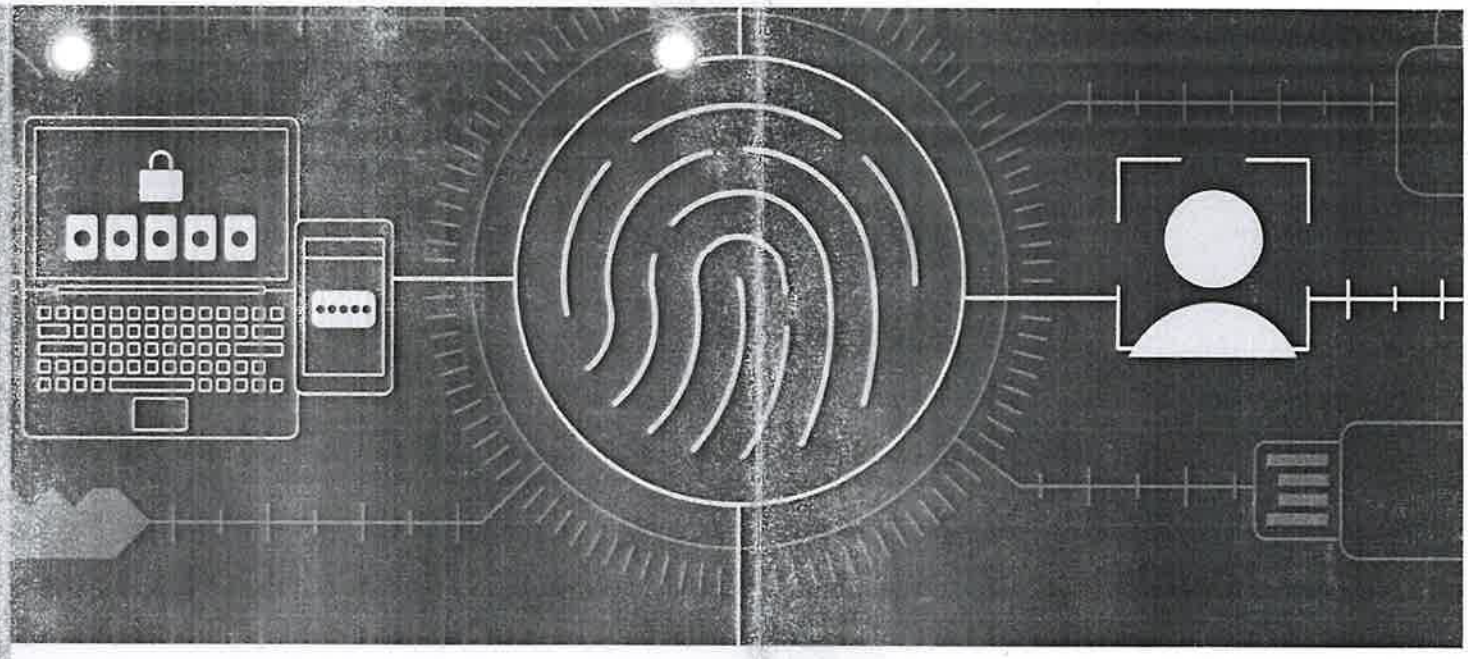
Mr.G.ARULSELVAN
Assistant Professor
CSE

ATTESTED
M.S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College
Nagapattinam - 611 002.
Tamil Nadu

Beneficiaries:

PG CSE Students

Course Duration : 40 Hours



ONE WEEK VALUE ADDED COURSE ON "ANALYSIS OF CRYPTOLOGY TECHNIQUES & ALGORITHMS"

Date:
13.05.2019 - 18.05.2019

Timings:
9:00 am - 5:00 pm

Organised by

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

at

E.G.S. PILLAY ENGINEERING COLLEGE
(AUTONOMOUS)
Approved by AICTE, New Delhi & Affiliated to Anna University,Chennai
Accredited by NAAC with 'A' Grade & NBA
Old Nagore Road, Thethi, Nagapattinam - 611002,Tamil Nadu,India

Course Objectives:

To make the student learn different encryption techniques along with hash functions, MAC, digital signatures and their use in various protocols for network security and system security.

ABOUT THIS COURSE:

Cryptology Is defined as the science of making communication incomprehensible to all people except those who have a right to read it and understand it.

Cryptology creates messages with hidden meaning; cryptanalysis is the science of breaking those encrypted messages to recover their meaning. It is important to remember that cryptology encompasses both cryptography and cryptanalysis.

In this course you will learn the inner workings of cryptographic systems and how to correctly use them in real-world applications. The course begins with a detailed discussion of how two parties who have a shared secret key can communicate securely when a powerful adversary eavesdrops and tampers with traffic.

Cryptology is used even when in our daily lives. Each time you make an online purchase, conduct a banking transaction, or log your email client, cryptography is working in the background. It secures all transmitted information in our IoT world, to authenticate people and devices, and

ABOUT THE DEPARTMENT

Department of Computer Science and Engineering programme was introduced at Edayathangudy G.S.Pillay Engineering College in the Academic Year 1995-1996. The demand for Computer Engineers in software companies, banking sectors and private sectors engaged in developing new trends of software generation is more than the engineers available.

The department has Recognized Research Centre for doing PhD / M.S. (By Research), obtained Permanent Affiliation from Anna University in the year 2014-15. The department has formed student association namely Computer Engineers Association (CEA) to promote talent of the students and their upliftment. The department has highly qualified and experienced faculties. The department has well experienced faculties in the research and more number of publications in reputed Journals and Conferences.

The department has well infrastructural facilities. From 2011 onwards every year, we are conducting International and National conferences. The B.E (CSE) programme was accredited by NBA in the year 2016

ABOUT THE COLLEGE

EGS Pillay Engineering College was started in the year 1995 under the sponsorship of G. S. Pillay & Sons Educational and Charitable Trust. College has gained the reputation of being most preferred engineering college by the students. College is approved by the AICTE, New Delhi and is affiliated to Anna University from 2002 and the degrees are awarded by Anna University, as per the Government Orders. It is ISO 9001:2008 certified.

The College has earned the reputation of being one of the most preferred colleges by the students and parents all these years. Known for its excellent infrastructure and facilities for learning, the outstanding non-grant engineering college has registered impressive performance consistently. A gate-way to success, the college has now set on long-range planning to enlarge and enrich its programs and activities to empower the youth who aspire to become

E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM.
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

EGSPEC/CSE/PG/VAC/2018-19/01 **Date: 08.05.2019**

CIRCULAR

It is to inform that Department of Computer Science and Engineering is going to organize a Value Added Course on **"Analysis of Cryptology Techniques & Algorithms"** from 13.05.2019 to 18.05.2019 (40 Hours) by, **Mr.G.Arulselvan,** Assistant Professor, Department of Computer Science and Engineering, E.G.S.Pillay Engineering College, Nagapattinam for PG-CSE Students. All the registered students are instructed to attend the course without fail.

Timings: 9:00 am – 5:00 pm

Venue: PGB - Digital Lab

Convener

HoD/CSE

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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E.G.S. PILLAY ENGINEERING COLLEGE (Autonomous)
NAGAPATTINAM

DEPARTMENT OF CSE

Value Added Course on

"ANALYSIS OF CRYPTOLOGY TECHNIQUES & ALGORITHMS"

PROGRAMME SCHEDULE

Date: 13.05.2019 – 18.05.2019

Date	Session	Topic
13.05.2019 DAY1	FN	Introduction to security attacks ,services and mechanism, introduction to cryptography, Conventional Encryption: Conventional encryption model, classical encryption techniques, substitution ciphers and transposition ciphers
	AN	Cryptanalysis, steganography, stream and blockciphers, Modern Block Ciphers: Block ciphers principals, Shannon's theory of confusion and diffusion, fiestal structure, data encryption standard(DES), block cipher modes of operations. triple DES. AES.
14.05.2019 DAY2	FN	Confidentiality using conventional encryption, traffic confidentiality, key distribution, random number generation, Introduction to graph, ring and field, prime and relative prime numbers
	AN	Modular arithmetic, Fermat's and Euler's theorem, Euclid's Algorithm, Chinese Remainder theorem, discrete algorithms.
15.05.2019 DAY3	FN	Principles of public key crypto systems, RSA algorithm & security
	AN	key management, Diffle-Hellman key exchange algorithm, Introductory idea of Elliptic curve cryptography, Elgamel encryption
16.05.2019 DAY4	FN	Message Authentication and Hash Function: Authentication requirements, authentication functions, message authentication code
	AN	Hash functions, birthday attacks, security of hash functions and MACS MD5 message digest algorithm, Secure hash algorithm (SHA)
17.05.2019 DAY5	FN	Digital Signatures: Digital Signatures, authentication protocols, digital signature standards (DSS)
	AN	Authentication Applications: Kerberos and X.509, directory authentication service , electronic mail security, pretty good privacy (PGP), S/MIME.
18.05.2019 DAY6	FN	IP Security: Architecture, Authentication header, Encapsulating security payloads, key management. Web Security: Secure socket layer and transport layer security, secure electronic transaction (SET).
	AN	System Security: Intruders, Viruses and related threads, firewall design principals, trusted systems. ASSESSSMENT TEST

Session Timings:

FN: 9:00 am to 1:00 pm

AN: 2:00 pm to 5:00 pm

ATTESTED

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Thethi, Nagore - 611 002.
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HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S. Pillay Engineering College

SYLLABUS

VALUE ADDED COURSE ON ANALYSIS OF CRYPTOLOGY TECHNIQUES & ALGORITHMS		
COURSE OBJECTIVES:		
	1. To learn about how to maintain the Confidentiality, Integrity and Availability of a data	
	2. To understand various protocols for network security to protect against the threats in the networks.	
MODULE I	**INTRODUCTION TO CRYPTANALSIS AND BLOCK CIPHERS**	**8 Hours**
Introduction to security attacks - services and mechanism - introduction to cryptography - Conventional Encryption: Conventional encryption model - classical encryption techniques - substitution ciphers and transposition ciphers – cryptanalysis – steganography - stream and blockciphers - Modern Block Ciphers: Block ciphers principals - Shannon's theory of confusion and diffusion - fiestal structure - data encryption standard(DES) - block cipher modes of operations - triple DES – AES.		
MODULE II	**CONFIDENTIALITY AND MODULAR ARITHMETIC**	**8 Hours**
Confidentiality using conventional encryption - traffic confidentiality - key distribution - random number generation - Introduction to graph - ring and field - prime and relative prime numbers - modular arithmetic - Fermat's and Euler's theorem - Euclid's Algorithm - Chinese Remainder theorem - discrete algorithms.		
MODULE III	**PUBLIC KEY CRYPTOGRAPHY AND AUTHENTICATION REQUIREMENTS**	**8 Hours**
Principles of public key crypto systems - RSA algorithm & security - key management – Diffle-Hellman key exchange algorithm - introductory idea of Elliptic curve cryptography – Elgamel encryption - Message Authentication and Hash Function: Authentication requirements - authentication functions - message authentication code - hash functions - birthday attacks – security of hash functions and MACS		
MODULE IV	**INTEGRITY CHECKS AND AUTHENTICATION ALGORITHMS**	**8 Hours**
MD5 message digest algorithm - Secure hash algorithm (SHA) Digital Signatures: Digital Signatures - authentication protocols - digital signature standards (DSS) - Authentication Applications: Kerberos and X.509 - directory authentication service - electronic mail security-pretty good privacy (PGP) - S/MIME.		
MODULE V	**SECURITY AND KEY MANAGEMENT**	**8 Hours**
IP Security: Architecture - Authentication header - Encapsulating security payloads - key management. Web Security: Secure socket layer and transport layer security - secure electronic transaction (SET). System Security: Intruders - Viruses and related threads - firewall design principals – trusted systems.		
	Total:	**40 Hours**
COURSE OUTCOMES:		
	After completion of the course, Student will be able to	
CO1	Provide security of the data over the network.	
CO2	Do research in the emerging areas of cryptography and network security.	
CO3	Implement various networking protocols.	
CO4	Implement authentication algorithms	
CO5	Protect any network from the threats in the world	
REFERENCES:		
1. William Stallings: Cryptography And Network Security- Principles And Practice, 5th Edition, Pearson/PHI, 2011.		
2. Wade Trappe, Lawrence C Washington, "Introduction to Cryptography with coding theory", Pearson.		

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Value Added Course

The following list of students had enrolled for the value added course on "Analysis of Crptology Techniques & Algorithms" from 13/05/2019 to 18/05/2019 (6 Days).

S.NO	REGISTER NUMBER	NAME OF THE STUDENT
1.	E17CPF001	ABARANADEVI B
2.	E17CPF002	ANJALI K P
3.	E17CPF004	BAKYA G
4.	E17CPF005	BIRUNTHA B
5.	E17CPF007	JAYACHITRA S
6.	E17CPF008	JAYASHRI A
7.	E17CPF009	KARTHIGA G
8.	E17CPF010	MATHUMITHA R
9.	E17CPF011	PRAVEENA S
10.	E17CPF012	PREETHI R
11.	E17CPF013	SABIREEN S M
12.	E17CPF014	SHANTHINI S
13.	E17CPF015	SRILEKHA K
14.	E17CPF016	SUBASHRI P
15.	E17CPF017	SWATHILAKSHMI G
16.	E17CPF018	VINOTHINI K
17.	E18CPF002	BALACHITRA B
18.	E18CPF003	BAVANI S
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20.	E18CPF005	KALAIVANI M
21.	E18CPF006	KALAIVANI V
22.	E18CPF007	KAVIYARASI V
23.	E18CPF009	RAMA G
24.	E18CPF014	THENMOZHI V R
25.	E18CPF015	TOUFIQ NISHA H
26.	E18CPF016	UDHAYA VEENA A

Course Coordinator

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E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(Academic Year: 2018-2019)

VALUE ADDED COURSE ON "ANALYSIS OF CRYPTOLOGY TECHNIQUES & ALGORITHMS"

PG – CSE | STUDENTS ATTENDANCE SHEET

S.No	Register Number	Name of Student	13.05.19		14.05.19		15.05.19		16.05.19		17.05.19		18.05.19	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	E17CPF001	ABARANADEVI B	P	P	P	P	P	P	P	P	P	P	P	P
2.	E17CPF002	ANJALI K P	P	P	P	P	P	P	P	P	P	P	P	P
3.	E17CPF004	BAKYA G	P	P	P	P	P	P	P	P	P	P	P	P
4.	E17CPF005	BIRUNTHA B	P	P	P	P	P	P	P	P	AB	AB	P	P
5.	E17CPF007	JAYACHITRA S	P	P	P	P	P	P	P	P	P	P	P	P
6.	E17CPF008	JAYASHRI A	AB	AB	P	P	P	P	P	P	P	P	P	P
7.	E17CPF009	KARTHIGA G	P	P	P	P	P	P	P	P	P	P	P	P
8.	E17CPF010	MATHUMITHA R	P	P	P	P	P	P	P	P	P	P	P	P
9.	E17CPF011	PRAVEENA S	P	P	P	P	P	P	P	P	P	P	P	P
10.	E17CPF012	PREETHI R	P	P	P	P	P	P	P	P	P	P	P	P
11.	E17CPF013	SABIREEN S M	P	P	P	P	P	P	AB	AB	P	P	P	P
12.	E17CPF014	SHANTHINI S	P	P	P	P	P	P	P	P	P	P	P	P
13.	E17CPF015	SRILEKHA K	P	P	P	P	P	P	P	P	P	P	P	P
14.	E17CPF016	SUBASHRI P	P	P	P	P	P	P	AB	AB	P	P	P	P
15.	E17CPF017	SWATHILAKSHMI G	P	P	P	P	P	P	P	P	P	P	P	P
16.	E17CPF018	VINOTHINI K	P	P	P	P	P	P	P	P	P	P	P	P

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17.	E18CPF002	BALACHITRA B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18.	E18CPF003	BAVANI S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
19.	E18CPF004	BHUVANESHWARI G	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20.	E18CPF005	KALAIVANI M	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21.	E18CPF006	KALAIVANI V	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22.	E18CPF007	KAVIYARASI V	P	P	AB	AB	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23.	E18CPF009	RAMA G	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24.	E18CPF014	THENMOZHI V R	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
25.	E18CPF015	TOUFIQ NISHA H	P	P	P	P	P	P	P	P	P	P	P	P	AB	AB	P	P	P	P	P	P	P	P
26.	E18CPF016	UDHAYA VEENA A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Total Present			25	25	25	25	26	26	24	24	24	24	26	26										
Total Absent			01	01	01	01	—	—	2	2	02	02	—	—										
Course Coordinator Signature																								

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Subject Material

MODULE I - INTRODUCTION TO CRYPTANALSIS AND BLOCK CIPHERS

INTRODUCTION

Computer data often travels from one computer to another, leaving the safety of its protected physical surroundings. Once the data is out of hand, people with bad intention could modify or forge your data, either for amusement or for their own benefit.

Cryptography can reformat and transform our data, making it safer on its trip between computers. The technology is based on the essentials of secret codes, augmented by modern mathematics that protects our data in powerful ways.

Computer Security - generic name for the collection of tools designed to protect data and to thwart hackers

Network Security - measures to protect data during their transmission

Internet Security - measures to protect data during their transmission over a collection of interconnected networks

Security Attacks, Services and Mechanisms

To assess the security needs of an organization effectively, the manager responsible for security needs some systematic way of defining the requirements for security and characterization of approaches to satisfy those requirements. One approach is to consider three aspects of information security:

Security attack – Any action that compromises the security of information owned by an organization.

Security mechanism – A mechanism that is designed to detect, prevent or recover from a security attack.

Security service – A service that enhances the security of the data processing systems and the information transfers of an organization. The services are intended to counter security attacks and they make use of one or more security mechanisms to provide the service.

Basic Concepts

Cryptography The art or science encompassing the principles and methods of transforming an intelligible message into one that is unintelligible, and then retransforming that message back to its original form

Plaintext The original intelligible message

Cipher text The transformed message

Cipher An algorithm for transforming an intelligible message into one that is unintelligible by transposition and/or substitution methods

Key Some critical information used by the cipher, known only to the sender& receiver

Encipher (encode) The process of converting plaintext to cipher text using a cipher and a key

Decipher (decode) the process of converting cipher text back into plaintext using a cipher and a key

Cryptanalysis The study of principles and methods of transforming an unintelligible message back into an intelligible message *without* knowledge of the key. Also called **code breaking**

Cryptology Both cryptography and cryptanalysis

Code An algorithm for transforming an intelligible message into an unintelligible one using a code-book

Cryptography

Cryptographic systems are generally classified along 3 independent dimensions:

Type of operations used for transforming plain text to cipher text

All the encryption algorithms are based on two general principles: **substitution**, in which each element in the plaintext is mapped into another element, and **transposition**, in which elements in the plaintext are rearranged.

The number of keys used

If the sender and receiver uses same key then it is said to be **symmetric key (or) single key (or) conventional encryption**.

If the sender and receiver use different keys then it is said to be **public key encryption**.

The way in which the plain text is processed

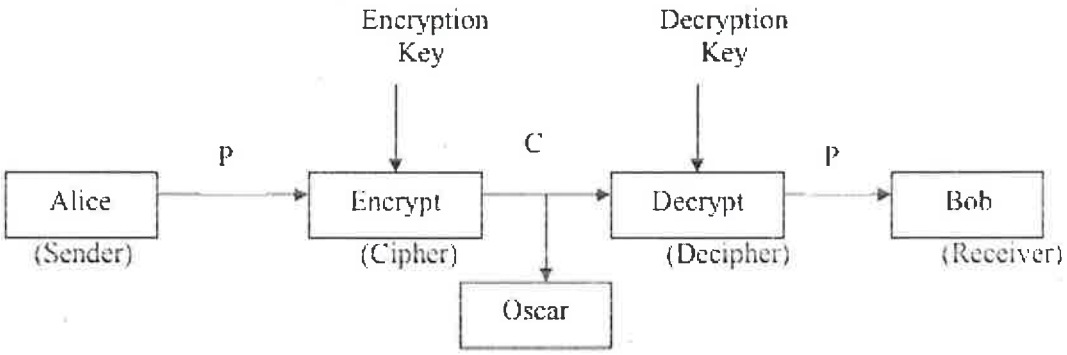
A **block cipher** processes the input and block of elements at a time, producing output block for each input block.

Conventional Encryption Models

The basic Communication Scenario for Cryptography

In the basic communication scenario, depicted in figure 3.1, there are two parties, we'll call them Alice and Bob, who want to communicate with each other. A third party, Oscar, is a potential eavesdropper. When Alice wants to send a message, called the **plaintext,** to Bob, she encrypts it using a method prearranged with Bob. Usually, the encryption method is assumed to be know to Oscar; what keeps the message secret is a **key.** When Bob receives the encrypted message, called the **ciphertext,** he changes it back to the plaintext using a decryption key. Oscar could have one of the following goals:

1. Read the message.
2. Find the key and thus read all messages encrypted with that key.
3. Corrupt Alice's message into another message in such a way that Bob will think Alice sent the alternated message.
4. Masquerade as Alice, and thus communicate with Bob even though Bob believes he is communicating with Alice.



The basic Communication Scenario for Cryptography

P- plaintext
C- ciphertext
$C = e_k(P)$
$P = d_k(C)$
$d_k = decryptrom\,key$

A more active and malicious adversary, corresponding to cases (3) and (4), is sometimes called Mallory in the literature. More passive observers (as in cases (1) and (2)) are sometimes named Oscar. We'll generally use only Eve, and assume she is as bad as the situation allows.

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VALUE ADDED COURSE ON ANALYSIS OF CRYPTOLOGY TECHNIQUES & ALGORITHMS

FROM 13/05/2019 TO 18/05/2019

Assessment Questions

Multiple Choice Questions (20*1 = 20)

1. Which mode of operation for a block cipher has the characteristic that each possible block of plaintext has a defined corresponding ciphertext value and vice versa?
   a) Footprinting
   b) Hash function
   c) Watermark
   d) Electronic code book

2. Which of the following is not a type of symmetric-key cryptography technique?
   a) Caesar cipher
   b) Data Encryption Standard (DES)
   c) Diffie Hellman cipher
   d) Playfair cipher

3. Which of the following is not a principle of data security?
   a) Data Confidentiality
   b) Data Integrity
   c) Authentication
   d) None of the above

4. Which of the following attacks is a passive attack?
   a) Masquerade
   b) Modification of message
   c) Denial of service
   d) Traffic analysis

5. Which of the following options correctly defines the Brute force attack?
   a) Brutally forcing the user to share the useful information like pins and passwords.
   b) Trying every possible key to decrypt the message.
   c) One entity pretends to be some other entity
   d) The message or information is modified before sending it to the receiver.

6. A key is a string of bits used by a cryptographic algorithm to transform plain text into ciphertext." Which of the following is capable of becoming a key in a cryptographic algorithm?
   a) An integer values
   b) A square matrix
   c) An array of characters (i.e. a string)
   d) All of the above

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7. A mechanism used to encrypt and decrypt data.
   a) Cryptography
   b) Algorithm
   c) Data flow
   d) None of these

8. To encrypt the plaintext, a cryptographic algorithm works in combination with a key...
   a) Word, number, or phrase
   b) Special Symbols
   c) Function Keys
   d) All of these

9. Conventional cryptography also known as ... encryption.
   a) asymmetric-key
   b) logical-key
   c) symmetric-key
   d) None of these

10. The Data Encryption Standard (DES) is an example of a ...
   a) Conventional cryptosystem
   b) Asymmetric cryptosystem
   c) Caesar's cryptosystem
   d) All of these

11. A process of studying cryptographic system is known as Cryptanalysis
   a) True
   b) False

12. Cipher in cryptography is –
   a) Encrypted message
   b) Algorithm for performing encryption and decryption
   c) Both algorithm for performing encryption and decryption and encrypted message
   d) Decrypted message

13. Which one of the following algorithms is not used in asymmetric-key cryptography?
   a) DSA algorithm
   b) Electronic code book algorithm
   c) Diffie-Hellman algorithm
   d) RSA algorithm

14. ElGamal encryption system is an asymmetric key encryption algorithm.
   a) Public-key cryptography
   b) Private-key cryptography
   c) Both
   d) None of these

15. Cryptanalysis is used _____
   a) to find some insecurity in a cryptographic scheme
   b) to increase the speed
   c) to encrypt the data
   d) to make new ciphers

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16. Voice privacy in GSM cellular telephone protocol is provided by _____
    a) A5/2 cipher
    b) b5/4 cipher
    c) b5/6 cipher
    d) b5/8 cipher

17. We are provided the plain text "SUN". You need to convert the given plain text into ciphertext under the Ceasar cipher encryption technique. Which of the following options is the correct ciphertext for the given text if the key is 2?
    a) UWP
    b) NUS
    c) WUP
    d) QSL

18. Which of the following ciphers is a block cipher?
    a) Caesar cipher
    b) Vernam cipher
    c) Playfair cipher
    d) None of the above

19. Block ciphers accumulate symbols in a message of a _____.
    a) Fixed size
    b) Variable
    c) Integration
    d) All of the mentioned above

20. In the case of symmetric key encryption, the secret key that both the parties possess can be anything such as a _____.
    a) Passcode or a password
    b) Developed code
    c) Network set
    d) None of the mentioned above

Answer:

1	2	3	4	5	6	7	8	9	10
d	c	d	d	b	d	a	a	c	a
11	12	13	14	15	16	17	18	19	20
a	b	b	b	a	a	a	c	a	a

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VALUE ADDED COURSE ON ANALYSIS OF CRYPTOLOGY TECHNIQUES & ALGORITHMS

FROM 13/05/2019 TO 18/05/2019

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20/20

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Department of CSE			
Value added course on Analysis of Cryptology Techniques & Algorithms			
Academic Year : 2018-2019			
Mark Sheet			
S. No	**Register Number**	**Name**	**Marks**
1.	E17CPF001	ABARANADEVI B	18
2.	E17CPF002	ANJALI K P	18
3.	E17CPF004	BAKYA G	19
4.	E17CPF005	BIRUNTHA B	16
5.	E17CPF007	JAYACHITRA S	18
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7.	E17CPF009	KARTHIGA G	17
8.	E17CPF010	MATHUMITHA R	18
9.	E17CPF011	PRAVEENA S	20
10.	E17CPF012	PREETHI R	16
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12.	E17CPF014	SHANTHINI S	17
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17.	E18CPF002	BALACHITRA B	17
18.	E18CPF003	BAVANI S	18
19.	E18CPF004	BHUVANESHWARI G	20
20.	E18CPF005	KALAIVANI M	16
21.	E18CPF006	KALAIVANI V	19
22.	E18CPF007	KAVIYARASI V	17
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25.	E18CPF015	TOUFIQ NISHA H	16
26.	E18CPF016	UDHAYA VEENA A	19

(Course Coordinator)

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Value Added Course on Analysis of Cryptology Techniques & Algorithms

Impact Analysis Report

S.NO	REGISTER No	STUDENT NAME	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	E17CPF001	ABARANADEVI B	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
2	E17CPF002	ANJALI K P	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
3	E17CPF004	BAKYA G	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
4	E17CPF005	BIRUNTHA B	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	0	1	1
5	E17CPF007	JAYACHITRA S	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1
6	E17CPF008	JAYASHRI A	1	1	0	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1
7	E17CPF009	KARTHIGA G	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1
8	E17CPF010	MATHUMITHA R	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
9	E17CPF011	PRAVEENA S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	E17CPF012	PREETHI R	1	0	1	1	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1
11	E17CPF013	SABIREEN S M	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
12	E17CPF014	SHANTHINI S	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1
13	E17CPF015	SRILEKHA K	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
14	E17CPF016	SUBASHRI P	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	E17CPF017	SWATHILAKSHMI G	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
16	E17CPF018	VINOTHINI K	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
17	E18CPF002	BALACHITRA B	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1
18	E18CPF003	BAVANI S	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
19	E18CPF004	BHUVANESHWARI G	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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20	E18CPF005	KALAIVANI M	1	0	1	1	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1
21	E18CPF006	KALAIVANI V	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
22	E18CPF007	KAVIYARASI V	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1
23	E18CPF009	RAMA G	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
24	E18CPF014	THENMOZHI V R	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	0	1	1
25	E18CPF015	TOUFIQ NISHA H	1	0	1	1	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1
26	E18CPF016	UDHAYA VEENA A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
TOTAL			22	21	25	24	23	24	20	26	21	23	24	22	22	23	24	24	24	24	23	25
ATTAINMENT			84.6	81	96.2	92	88.5	92.3	76.9	100	80.8	88	92	84.6	85	88	92.3	92.3	92.3	92.3	88.46	96.15
LEVEL OF ATTAINMENT			2(M)	2(M)	3 (S)	3(S)	2 (M)	3 (S)	1(L)	3 (S)	2(M)	2(M)	3(S)	2(M)	2(M)	2(M)	3(S)	3 (S)	3(S)	3 (S)	2(M)	3 (S)

Attainment level calculation	
>=70%-79%	1 (L)
>=80%-89%	2 (M)
>=90%	3 (S)

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Mapping of Course Outcomes Vs Program Outcomes

CO Number	Competency	Cognitive level
CO1	Provide security of the data over the network.	Apply
CO2	Do research in the emerging areas of cryptography and network security.	Analyze
CO3	Implement various networking protocols.	Apply
CO4	Implement authentication algorithms	Apply
CO5	Protect any network from the threats in the world	Understand

CO to PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	-	-	-	-	-	-	-	-	-	-
CO2	2	2	-	-	-	-	-	-	-	-	-	1
CO3	2	2	-	-	-	-	-	-	-	-	-	1
CO4	2	-	-	-	-	-	-	-	-	-	-	1
CO5	2	-	-	-	-	-	-	-	-	-	-	1

CO to PSO Mapping

Course Outcome	PSO1	PSO2
CO1	1	1
CO2	2	2
CO3	2	2
CO4	2	-
CO5	2	-

1. Slight(Low) 2. Moderate(Medium) 3.Substantial(High) "-" No Correlation

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E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous), NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Academic Year : 2018 – 2019 **Batch:** 2018

Name of the Value Added Course: Analysis & Cryptology Techniques & Algorithms **Semester:** II

Student Name: E18CPF005

Register Number: Kalaivani . M.

Staff Handling: Mr. G. Arulselvan.

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course Content	✓				
2	Skill Development		✓			
3	Motivation	✓				
4	Regularity and Punctuality of teacher	✓				
5	Coverage of syllabus	✓				
6	Interaction		✓			
7	Individual attention	✓				
8	Outcome	✓				
9	Other suggestions	Algorithms are very difficult to understand.				

M. Kalaivani
Signature of the student

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E.G.S.PILLAY ENGINEERING COLLEGE (Autonomous), NAGAPATTINAM

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Academic Year : E17CPE004 (2018-19) Batch: 2017

Name of the Value Added Course: Analysis of cryptology techniques & Atg.. Semester: III

Student Name: E17CPE004/ G. Bakya

Register Number:

Staff Handling: Mr. G. Arulselvan

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very Good	Good	Fair	Satisfactory
1	Course Content	✓				
2	Skill Development	✓				
3	Motivation	✓				
4	Regularity and Punctuality of teacher	✓				
5	Coverage of syllabus		✓			
6	Interaction	✓				
7	Individual attention	✓				
8	Outcome	✓				
9	Other suggestions	Very Useful Course				

G. Bakya

Signature of the student

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E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM
DEPARTMENT OF CSE

COURSE SUMMARY REPORT

1. Title: ANALYSIS OF CRPTOLOGY TECHNIQUES & ALGORITHMS
2. Name of Speaker: Mr.G.Arulselvan
3. Speaker Details: Assistant Professor, CSE Department, EGSPEC.
4. Date of speaker's presentation: 13.05.2019 – 18.05.2019
5. Duration of the Course : 40 Hours
6. Beneficiary Details: PG CSE Students
7. Coordinator: Mr. K.Balasubramanian (Assoc. Prof., CSE,EGSPEC)

More about this course

Cryptology is an indispensable tool for protecting information in computer systems. In this course, the inner workings of cryptographic systems and how to correctly use them in real-world applications have been explained. Many cryptographic algorithms arise naturally out of their use in other contexts, such as digital signature schemes or encryption techniques for secure electronic commerce over insecure networks such as the Internet. This course covers a wide variety of IT security concepts, tools, and best practices. At the end of this course, you'll understand: (1) how various encryption algorithms and techniques work as well as their benefits and limitations. (2) various authentication systems and types. (3) the difference between authentication and authorization. (4) how to evaluate potential risks and recommend ways to reduce risk. (5) best practices for securing a network. (6) how to help others to grasp security concepts and protect themselves. Students felt that this course was very much useful for them and they got some basic ideas on the analysis in cryptography or cryptanalysis.

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Old Nagore Road, Thethi, Nagapattinam - 611002, Tamil Nadu, India

Department of Computer Science and Engineering

Certificate of Completion

This is to certify that

Mr./Ms. BAKYA G

has successfully completed the value added course on **"Analysis of Cryptology Techniques & Algorithms"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College, Nagapattinam from **13/05/2019** to **18/05/2019**.

ATTESTED
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Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

Coordinator
Dr.K.Balasubramanian

HOD/CSE
Dr.M.Chinnadurai

Principal
Dr.S.Ramabalan

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Department of Computer Science and Engineering

Certificate of Completion

This is to certify that

Mr./Ms. VINOTHINI K

has successfully completed the value added course on **"Analysis of Cryptology Techniques & Algorithms"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College, Nagapattinam from **13/05/2019** to **18/05/2019**.

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Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

Coordinator
Dr.K.Balasubramanian

HOD/CSE
Dr.M.Chinnadurai

Principal
Dr.S.Ramabalan

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Department of Computer Science and Engineering

Certificate of Completion

This is to certify that

Mr./Ms. KALAIVANI V

has successfully completed the value added course on **"Analysis of Cryptology Techniques & Algorithms"** conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College, Nagapattinam from **13/05/2019** to **18/05/2019**.

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HOD/CSE
Dr.M.Chinnadurai

Principal
Dr.S.Ramabalan


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