ANNA UNIVERSITY, CHENNAI

AFFILIATED INSTITUTIONS

R-2013

B.E. COMPUTER SCIENCE AND ENGINEERING

SEMESTER V

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	MA6566	Discrete Mathematics	3	1	0	4
2.	CS6501	Internet Programming	3	1	0	4
3.	CS6502	Object Oriented Analysis and Design	3	0	0	3
4.	CS6503	Theory of Computation	3	0	0	3
5.	CS6504	Computer Graphics	3	0	0	3

SEMESTER VI

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	CS6601	Distributed Systems	3	0	0	3
2.	IT6601	Mobile Computing	3	0	0	3
3.	CS6660	Compiler Design	3	0	0	3
4.	IT6502	Digital Signal Processing	3	1	0	4
5.	CS6659	Artificial Intelligence	3	0	0	3
6.	GE6757	Total Quality Management (Elective I)	3	0	0	3
7.	IT6702	Data Warehousing and Data Mining (Elective I)	3	0	0	3

SEMESTER VII

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	CS6701	Cryptography and Network Security	3	0	0	3
2.	CS6702	Graph Theory and Applications	3	0	0	3
3.	CS6703	Grid and Cloud Computing	3	0	0	3
4.	CS6704	Resource Management Techniques	3	0	0	3
5.	CS6003	Ad hoc and Sensor Networks (Elective II)	3	0	0	3
6.	CS6007	Information Retrieval (Elective III)	3	0	0	3

SEMESTER VIII

SL. No.	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	CS6801	Multi – Core Architectures and Programming	3	0	0	3
2.	IT6011	Knowledge Management (Elective IV)	3	0	0	3
3.	MG6088	Software Project Management (Elective V)	3	0	0	3

20/5/14

Signature of HOD

Head of the Department
Computer Science & Engineering
Mount Zion College of Engg. & Tech
Pudukkottai - 622 507

K. DURGA
DISCRETE MATHEMATICS
V th SEM

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name	Course Outcome(CO) Students will be able to	Knowledge Level
MA6566	DISCRETE MATHEMATICS	CO1: Define the Logical operators.	K1
		CO2: Explain the concepts needed to test the Logic of a program.	K2
		CO3: Solve the problems using logical Operators.	K3
		CO4: Identify the structures on many levels.	K1
		CO5: Explain the rules of inference.	K2
		CO6: Define Graphs and Graph models.	K1
		CO7: Apply Graph terminology in problems.	K3
		CO8: Explain the concept of Algebraic Structure.	K2
		CO9: Apply finite set into another set which relates to input and output functions.	K3
		CO10: Define lattices and Boolean algebra.	K1
		CO11: Solve the problems on lattices.	K3

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3/K5/K6							
C3O1.1	K1	1	-	-	-	1	-	-	-	-	-	-	-
C3O1.2	K2	2	1	-	-	-	-	-	-	-	-	-	-
C3O1.3	K3	3	2	1	1	1	-	-	-	-	-	-	-
C3O1.4	K1	1	-	-	-	1	-	-	-	-	-	-	-
C3O1.5	K2	2	1	-	-	-	-	-	-	-	-	-	-
C3O1.6	K1	1	-	-	-	1	-	-	-	-	-	-	-
C3O1.7	K3	3	2	1	1	1	-	-	-	-	-	-	-
C3O1.8	K2	2	1	-	-	-	-	-	-	-	-	-	-
C3O1.9	K3	3	2	1	1	1	-	-	-	-	-	-	-
C3O1.10	K1	1	-	-	-	1	-	-	-	-	-	-	-
C3O1.11	K3	3	2	1	1	1	-	-	-	-	-	-	-

20/5/18

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IV th Sem

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name	Course Outcome(CO) Students will be able to	Knowledge Level
CS6501	Internet Programming	**CO1:**Apply the concept of inheritance, multithreading, packages in java programming	K3
		CO2: Develop a static website with hyperlinks, tables, images using HTML	K3
		CO3: Apply a java script for validation of web forms	K3
		CO4: Design of dynamic web pages using control structure & built-in functions in PHP	K3
		CO5: Develop a database supported online application using JS and JDBC	K3
		CO6:Describe the Rich Internet Application Technologies for front end presentation of web page	K2
		CO7: Design E-Com application with help of session tracking	K3
		CO8: Design of dynamic stylish web pages using CSS	K3
		CO9: Explain function and benefits of web service	K2

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3/K5/K6							
CO1	K3	3	2	1	1	-	-	-	-	-	-	-	-
CO2	K3	3	2	1	1	1	-	-	-	-	-	-	-
CO3	K3	3	2	1	1	-	-	-	-	-	-	-	-
CO4	K3	3	2	1	1	1	-	-	-	-	-	-	-
CO5	K3	3	2	1	1	1	-	-	-	-	-	-	-
CO6	K2	2	1	-	-	-	-	-	-	-	-	-	-
CO7	K3	3	2	1	1	1	-	-	-	-	-	-	-
CO8	K3	3	2	1	1	-	-	-	-	-	-	-	-
CO9	K2	2	1	-	-	-	-	-	-	-	-	-	-

20/5/18

Head of the Department
Computer Science & Engineering
Mount Zion College of Engg. & Tech.
Pudukkottai - 622 507

STAFF : Mr. Jagadeesh

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Faculty Name : UmaMaheshwari

Course Code	Course Name		Course Outcome(CO) Students will be able to	Knowledge Level
CS6503	THEORY OF COMPUTATION	C3O4.1	Explain the operations & algebraic properties of Regular Expression	K2
		C3O4.2	Develop transition diagram & transition function for NFA & DFA	K3
		C3O4.3	Find regular expression for finite automata diagram	K3
		C3O4.4	Explain the types of grammar and its corresponding languages	K2
		C3O4.5	Identify the different types of finite automata & its capabilities	K1
		C3O4.6	Solve context free grammar for Push down automata	K3
		C3O4.7	Prove whether the language is context free language or not	K3
		C3O4.8	Discuss the various techniques for Turing machine construction	K2
		C3O4.9	Explain decidability and undecidability of various problems	K2
		C3O4.10	Develop Turing machine for post correspondence problem.	K3

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3	K4	K2	K3	K3	K2	K3	K3
C3O4.1	K2	2	1	-	-	-	-	3	-	2	3	2	-
C3O4.2	K3	3	2	1	1	-	-	3	-	3	3	3	-
C3O4.3	K3	3	2	1	1	-	-	3	-	3	3	3	-
C3O4.4	K2	2	1	-	-	-	-	3	-	2	3	2	-
C3O4.5	K1	1	-	-	-	-	-	2	-	1	2	1	-
C3O4.6	K3	3	2	1	1	-	-	3	-	3	3	3	-
C3O4.7	K3	3	2	1	1	-	-	3	-	3	3	3	-
C3O4.8	K2	2	1	-	-	-	-	3	-	2	3	2	-
C3O4.9	K2	2	1	-	-	-	-	3	-	2	3	2	-
C3O4.10	K3	3	2	1	1	-	-	3	-	3	3	3	-

20/5/18

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2018 - 19 (ODD SEMESTER)

V - SEMESTER

REKA S.
AP/CSE

MOUNT ZION COLLEGE OF ENGINEERIN G AND TECHNOLOGY

COURSE OUTCOME

CS6504 – Computer Graphics

C304.1 – Interpret graphics hardware and software for creating image. (K2)

C304.2 – Design two dimensional graphics using library functions. (K3)

C304.3 – Create an object by using two dimensional transformations. (K5)

C304.4 –Design three dimensional graphics using library functions. (K3)

C304.5–Design an object by using three dimensional transformations.(K3)

C304.6 –Apply illumination and color models using graphics hardware devices. (K3)

C304.7 –Design to clip an image by using clipping techniques. (K3)

C304.8- Create two dimensional animation using OPENGL. (K5)

C304.9 –Apply parallel and perspective projection by three dimensional objects. (K3).

CO - PO MAPPING

CO#	PO1 (K3)	PO2(K4)	PO3(K5)	PO4(K5)	PO5(K3/K5/K6)	PO6(K4)	PO7(K2)	PO8	PO9	PO10(K2)	PO11	PO12
C203.1 (K2)	2	1	-	-	-	-	-	-	-	-	-	-
C203.2 (K3)	3	2	1	1	-	-	-	-	-	-	-	-
C203.3(K5)	3	2	1	1	-	-	-	-	-	-	-	-
C203.4(K3)	3	3	3	3	-	-	-	-	-	-	-	-
C203.5(K3)	3	3	3	3	-	-	-	-	-	-	-	-
C203.6(K3)	3	2	1	1	-	-	-	-	-	-	-	-
C203.7(K3)	3	2	1	1	-	-	-	-	-	-	-	-
C203.8(K5)	3	3	2	2	3	2	-	-	-	-	-	-
C203.9(K3)	3	3	2	2	-	-	-	-	-	-	-	-
C203	2.888889	3	2	2		2	-	-	-	-	-	-

20/5/18

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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE

COURSE CODE & NAME: C303 - CS6502 - Object Oriented Analysis and Design
REGULATION: R2013 **YEAR/SEM:** III/V

COURSE OUTCOMES

Course Code	Course Name		Course Outcome(CO) Students will be able to	Knowledge Level
CS6502	Object Oriented Analysis and Design	C303.1	Explain OOAD concepts and various UML diagrams	K2
		C303.2	Select an appropriate design pattern	K2
		C303.3	Illustrate about domain models and conceptual classes	K2
		C303.4	Compare and contrast various testing techniques	K2
		C303.5	Construct projects using UML diagrams	K3

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3							
C303.1	K2	1	2	3	3	1	-	-	-	-	-	-	-
C303.2	K2	1	2	3	3	1	-	-	-	-	-	-	-
C303.3	K2	1	2	3	3	1	-	-	-	-	-	-	-
C303.4	K2	1	2	3	3	1	-	-	-	-	-	-	-
C303.5	K3	3	1	2	2	3	-	-	-	-	-	-	-

20/5/18

Head of the Department
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Pudukkottai - 622 507

STAFF : MS. PRIYA K.

VI th sem

Course Code &Name CS6601 Distributed Systems

REGULATION: R2013 YEAR/SEM: III/VI

COURSE OUTCOMES

1. **Explain the distributed systems architecture.**
2. **Implement the inter process communication in distributed systems.**
3. **Describe the file accessing model and various services in distributed system.**
4. **Demonstrate concurrency control and properties of transaction in Distributed systems.**
5. **Discuss resource and process management in distributed system**

CO-PO CORRELATION LEVEL MATRIX

COs		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3/K5/K6							
1	K2	2	1										
2	K3	3	2	1		3							
3	K2	2	1										
4	K3	3	2	1		3							
5	K2	2	1										

STAFF : Mrs. ELAVARASI

12/12/18

Head of the Department
Computer Science & Engineering
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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name		Course Outcome(CO) Students will be able to	Knowledge Level
CS6660	COMPILER DESIGN	C360.1	Explain the different phases of compiler	K2
		C360.2	Identify formal grammars for specifying the syntax and semantics of programming languages	K1
		C360.3	Generate symbol table and intermediate code for a given program	K5
		C360.4	Apply code optimization techniques to improve the performance of a program	K3
		C360.5	Identify tools to construct the machine independent code	K1

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3	K4	K2	K3	K3	K2	K3	K3
C360.1	K2	1	2	-	-	1	-	-	-	-	-	-	-
C360.2	K1	2	2	-	-	2	-	-	-	-	-	-	-
C360.3	K5	2	1	5	5	2	-	-	-	-	-	-	-
C360.4	K3	3	1	2	2	3	-	-	-	-	-	-	-
C360.5	K1	2	-	-	-	2	-	-	-	-	-	-	-

STAFF : UMA MAHESHWARI

12/12/18

Head of the Department
Computer Science & Engineering
Mount Zion College of Engg. & Tech
Pudukkottai - 622 507

Course Code &Name : C313- CS6659 Artificial Intelligence
REGULATION: R2013
YEAR/SEM: III/VI

COURSE OUTCOMES

C313.1	Identify problems that are amenable to solution by AI methods.
C313.2	Recognize appropriate AI methods to solve a given problem.
C313.3	Discuss a given problem in the language/framework of different AI methods.
C313.4	Develop basic AI algorithms.
C313.5	Model an empirical evaluation of different algorithms on a problem for mail sation, and state the conclusions that the evaluation supports.

CORRELATION LEVELS

Substantial/ High	3
Moderate/ Medium	2
Slight/ Low	1
No correlation	0

CO – PSO CORRELATION LEVEL MATRIX

COs	PSOs			
	PSO1	PSO2	PSO3	PSO4
C313.1	3	2		
C313.2	3	2		
C313.3	3	2	1	1
C313.4	3	2	1	1
C313.5	3	3	1	1
C313	3	2	1	1

CO-PO CORRELATION LEVEL MATRIX

COs	Pos											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C313.1	3	3	2	1								
C313.2	3	3	2	1								
C313.3	3	3	2	2		1	1	2				
C313.4	3	3	3	3	2	1	1	2	1	1	1	2
C313.5	3	3	3	3	2	1	1	2	1	1	1	2
C313	3	3	2	2	2	1	1	2	1	1	1	2

STAFF : SATHYA M.

Head of the Department 12/12/18
Computer Science & Engineering
Mount Zion College of Engg. & Tech
Pudukkottai - 622 507

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE OUTCOMES – REGULATION 2013

Course Code	Course Name	Course Outcome Students will be able to		Knowledge Level
IT6502	Digital Signal Processing	C304.1	Demonstrate the analytical representation of discrete-time signals	K2
		C304.2	Illustrate the properties of systems and signals	K2
		C304.3	Execute the transform domain concepts in computational complexity problems	K3
		C304.4	Implement IIR and FIR filters for the given specifications	K3
		C304.5	Infer finite word length effects in digital filters	K2

CO-PO Mapping

CO		Program Outcomes											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3/K5 /K6							
C304.1	K2	2	1	-	-	-	-	-	-	-	-	-	-
C304.2	K2	2	1	-	-	-	-	-	-	-	-	-	-
C304.3	K3	3	2	1	1	-	-	-	-	-	-	-	-
C304.4	K3	3	2	1	1	1	-	-	-	-	-	-	-
C304.5	K2	2	1	-	-	-	-	-	-	-	-	-	-
C304		2.4	1.16	1	1	1	-	-	-	-	-	-	-

12/12/16

STAFF : TAKSALA DEVA PRIYA

Computer Science & Engineering
Mount Zion College of Engg. & Tech.
Pudukkottai - 622 507

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name	Course Outcome(CO) Students will be able to		Knowledge Level
IT6601	Mobile Computing	C302:1	Explain the basics of mobile Computing	K2
		C302:2	Compare all the MAC protocols	K2
		C302:3	Describe the functionality of Mobile IP and Transport Layer	K2
		C302:4	Compare the improvements of TCP.	K2
		C302:5	Classify different types of mobile telecommunication systems	K2
		C302:6	Describe the protocols used in GSM,GPRS,UMTS	K2
		C302:7	Demonstrate the Adhoc networks concepts and its routing protocols	K2
		C302:8	Compare MANET and VANET with security issues	K2
		C302:9	Make use of mobile operating systems in developing mobile applications	K3
		C302:10	Discuss Mobile payment and mobile commerce	K2

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3/K5/K6							
C302:1	K2	2	1	-	-	-	-	-	-	-	-	-	-
C302:2	K2	2	1	-	-	2	-	-	-	-	-	-	-
C302:3	K2	2	1	1	-	2	-	-	-	-	-	-	-
C302:4	K2	2	1	-	-	2	-	-	-	-	-	-	-
C302:5	K2	2	1	-	-	2	-	-	-	-	-	-	-
C302:6	K2	2	1	1	-	2	-	-	-	-	-	-	-
C302:7	K2	2	1	-	-	2	-	-	-	-	-	-	-
C302:8	K2	2	1	2	-	2	-	-	-	-	-	-	-
C302:9	K3	3	2	-	1	3	-	-	-	-	-	-	-
C302:10	K2	2	1	-	-	2	-	-	-	-	-	-	-
C302		2.1	1.1	0.4	0.1	1.9	-	-	-	-	-	-	-

STAFF : HEMASWATHI

Head of the Department
Computer Science & Engineering
Mount Zion College of Engg. & Tech.
Pudukkottai - 622 507

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name	Course Outcome(CO) Students will be able to	Knowledge Level
GE 6757	TOTAL QUALITY MANAGEMENT	CO1: Outline the dimensions and Barriers regarding to Quality	K2
		CO2: Illustrate the TQM Principles	K2
		CO3: Demonstrate Tools Utilization for Quality improvement	K3
		CO4: Explain the various types of techniques that are used to measure Quality	K2
		CO5: Apply various Quality systems and Auditing on implementation of TQM.	K3

CO-PO MAPPING

COs		Pos											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3							
C357.1	K2	1	2	*	*	1	-	-	-	-	-	-	-
C357.2	K2	1	2	*	*	1	-	-	-	-	-	-	-
C357.3	K3	3	1	2	2	3	-	-	-	-	-	-	-
C357.4	K2	1	2	*	*	1	-	-	-	-	-	-	-
C357.5	K3	3	1	2	2	3	-	-	-	-	-	-	-

12/12/17

Head of the Department
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Mount Zion College of Engg. & Tech.
Pudukkottai - 622 507

STAFF : INDHUMATHI

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name	Course Outcome(CO) Students will be able to	Knowledge Level
IT6702	DATA WAREHOUSING AND DATA MINING	CO1: Describe data ware concepts and architecture.	K2
		CO2: Classify the various OLAP types.	K2
		CO3: Define Data mining and list out the steps in data mining.	K1
		CO4: Make use of tool for association rule mining and classification.	K3
		CO5: Compare the various clustering method in Data mining.	K4

CO-PO MAPPING

COs		Pos											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3							
C3O2.1	K2	1	2	*	*	1	-	-	-	-	-	-	-
C3O2.4	K2	1	2	*	*	1	-	-	-	-	-	-	-
C3O2.3	K1	2	*	*	*	2	-	-	-	-	-	-	-
C3O2.4	K3	3	1	2	2	3	-	-	-	-	-	-	-
C3O2.5	K4	1	4	1	1	1	-	-	-	-	-	-	-
AVG		1.6	2.25	1.5	1.5	1.6							

STAFF : YOGESWARI

8/11/17

Head of the Department
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Mount Zion College of Engg. & Tech
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VII SEM.

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Faculty Name : UmaMaheshwari

Course Code	Course Name		Course Outcome(CO) Students will be able to	Knowledge Level
CS6704	RESOURCE MANAGEMENT TECHNIQUES	C3O4.1	Solve the linear programming problems using Graphical method and Simplex method.	K3
		C3O4.2	Apply the operational research techniques to solve real life problems.	K3
		C3O4.3	Solve specialized Linear programming problems like transportation and assignment problems.	K3
		C3O4.4	Solve all integer linear programs by cutting plane method.	K3
		C3O4.5	Using Branch & Bound techniques solve real world problems.	K3
		C3O4.6	Solve problems using Dynamic programming	K3
		C3O4.7	Use classical application techniques & Numerical methods for Optimization	K3
		C3O4.8	Compute Critical path analysis to solve real life project schedule time & timely delivery	K2
		C3O4.9	Explain the role & applications of PERT/CPM for project scheduling	K2
		C3O4.10	Apply schedule & control project cost with PERT/COST .	K3

CO-PO MAPPING

COs		Pos											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3/K5/K6	K4	K2	K3	K3	K2	K3	K3
C3O4.1	K3	3	2	1	1	-	-	-	-	3	3	-	3
C3O4.2	K3	3	2	1	1	-	-	-	-	3	3	-	3
C3O4.3	K3	3	2	1	1	-	-	-	-	3	3	-	3
C3O4.4	K3	3	2	1	1	-	-	-	-	3	3	-	3
C3O4.5	K1	1	-	-	-	-	-	-	-	1	2	-	1
C3O4.6	K2	2	1	-	-	-	1	-	-	2	3	-	2
C3O4.7	K3	3	2	1	1	3	-	-	-	3	3	-	3
C3O4.8	K2	2	1	-	-	2	-	-	-	2	3	2	2
C3O4.9	K2	2	1	-	-	-	-	-	-	2	3	2	2
C3O4.10	K3	3	2	1	1	-	-	-	-	3	3	3	3

STAFF: SWAMINATHAN G.

12/06/18

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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name	Course Outcome(CO) Students will be able to		Knowledge Level
CS6701	Cryptography and Network Security	C401:1	Explain the various encryption techniques	K2
		C401:2	Explain the basics of number theory and apply algorithm to test the numbers	K2
		C401:3	Use the block cipher methods to calculate the ciphers.	K3
		C401:4	Summarize the functionality of public key cryptography	K2
		C401:5	Discuss the authentication algorithms.	K2
		C401:6	Apply various message authentication functions and secure algorithms to find secret codes.	K3
		C401:7	Describe different types authentication algorithms	K2
		C401:8	Evaluate firewall rules and policy setup implementation	K6
		C401:9	Demonstrate the PGP,MIME services	K2
		C401:10	Discuss different levels of security and services	K2

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3/K5/K6							
C401:1	K2	2	1	-	-	-	-	-	-	-	-	-	-
C401:2	K2	2	1	-	-	2	-	-	-	-	-	-	-
C401:3	K3	3	-	1	1	3	-	-	-	-	-	-	-
C401:4	K2	3	1	-	-	2	-	-	-	-	-	-	-
C401:5	K2	1	-	-	-	2	-	-	-	-	-	-	-
C401:6	K3	3	2	1	1	3	-	-	-	-	-	-	-
C401:7	K2	2	1	-	-	2	-	-	-	-	-	-	-
C401:8	K6	-	-	2	2	3	-	-	-	-	-	-	-
C401:9	K2	2	1	-	-	2	-	-	-	-	-	-	-
C401:10	K2	2	1	-	-	2	-	-	-	-	-	-	-
C401		2	1.2	0.4	0.4	2.1	-	-	-	-	-	-	-

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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Code	**CS6702**	**Year/Sem**	**IV/VII**
Course Name	**Graph Theory and Applications**	**Programme**	**UG**
Faculty Name	**M.S.Ramadevi**	**Regulation**	**2013**

COURSE OUTCOME

CO No	Course Outcome	Knowledge Level
C401.1	Define basic concepts & terminologies of Graph, Isomorphism, Trees and its properties	K1
C402.2	Differentiate whether the given graph is isomorphic or not Hamiltonial circuit or path	K2
C402.3	Analyze solution for konigsberg bridge problem using Eulers graph	K3
C402.4	Expalin about Trees Connectivity & Planarity	K2
C402.5	Analyze a solution for the maximum flow in network using Network Flow Graph theory	K3
C402.6	Analyze a solution for Traffic Problem using coloring Fuzzy Graph	K3
C402.7	Understand the Principles of Inclusion and Exclusion,Binomial Theorem etc..	K2
C402.8	Apply Permutation and Combination and solve seating arrangement problem	K3
C402.9	Generate a function for any given series like 2 + 2x +5x^2..	k3

CO - PO MAPPING

CO(C402)	PO1(K3)	PO2(K4)	PO3(K5)	PO4(K5)	PO5(K3)	PO6(k3)	PO7	PO8	PO9	PO10	PO11	PO12
C402.1 (K1)	1	*	*	*	1	*	*	*	*	*	*	*
C402.2(K2)	2	1	*	*	2	*	*	*	*	*	*	*
C402.3(K3)	3	2	1	1	3	*	*	*	*	*	*	*
C402.4(K2)	2	1	*	*	2	*	*	*	*	*	*	*
C402.5(K3)	3	2	1	1	3	*	*	*	*	*	*	*
C402.6(K3)	3	2	1	1	3	*	*	*	*	*	*	*
C402.7(K3)	3	2	1	1	3	*	*	*	*	*	*	*
C402.8(K2)	2	1	*	*	*	*	*	*	*	*	*	*
C402.9(K3)	3	2	1	1	3	*	*	*	*	*	*	*
C402	2.44	1.63	1.00	1.00	2.50	*	*	*	*	*	*	*

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VII Sem

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ECE
REGULATION 2017
B.E CSE - COURSE OUTCOMES (CO)

Course Code & Course Name : CS6703 - GRID AND CLOUD COMPUTING

Course Outcome(CO) Students will be able to	Knowledge Level
CO1: Discuss grid computing techniques to solve large scale scientific problems	K2
CO2: Apply the concept of virtualization using virtualization method.	K3
CO3: List out the deployment models of cloud.	K1
CO4: Use the cloud toolkit like Globus to build cloud environment.	K3
CO5: Develop a new Web Service for Calculator.	K3
CO6: Apply matrix vector multiplication program using map reduce technique.	K3
CO7: Use the Map Reduce concept to demonstrate word count program.	K3
CO8: Differentiate grid computing and cloud computing.	K2
CO9: Discuss trust model to ensure security environment in grid.	K1
CO10: List out the deployment models of cloud.	K1

CO-PO MAPPING

COs		POs											
		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
		K3	K4	K5	K5	K3	K4	K2	K3	K3	K2	K3	K3
CO1	K2	2	1	-	-	2	1	-	-	-	-	-	-
CO2	K3	3	2	1	1	3	2	3	3	3	3	3	3
CO3	K1	-	-	-	-	-	-	-	-	-	-	-	-
CO4	K3	3	2	1	1	3	2	3	3	3	3	3	3
CO5	K3	3	2	1	1	3	2	3	3	3	3	3	3
CO6	K3	3	2	1	1	3	2	3	3	3	3	3	3
CO7	K3	3	3	1	1	3	3	3	3	3	3	3	3
CO8	K2	2	1	-	-	2	1	-	-	-	-	-	-
CO9	K1	-	-	-	-	-	-	-	-	-	-	-	-
CO10	K1	-	-	-	-	-	-	-	-	-	-	-	-

STAFF : SANGEETHA

12/4/18

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CO – PO Mapping 2018 – 2019

IV – Year VII – Semester

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Outcome

CS6003 AD HOC AND SENSOR NETWORKS Elective

1. Understand the needs of Wireless Ad hoc and Sensor Network in current scenario of technology. (Unit I) K2
2. Understand the concept of ad-hoc and sensor networks, their applications and typical node and network architectures. (Unit I) K2
3. Learn to model radio signal propagation issues and analyze their impact on communication system performance (unit I) K1
4. Discuss the challenges in designing MAC protocols for wireless Ad-hoc/sensor networks. (Unit II) K2
5. Analyze the protocol design issues of ad hoc and sensor networks with Reservation and Scheduling mechanism (Unit II) K3
6. Understand the protocol design issues (especially energy-efficiency) and protocol designs for wireless sensor networks (Unit III) K2
7. Evaluate measurements of protocol performance in wireless sensor networks. (Unit III) K3
8. Describe the challenges in designing routing and transport protocols for wireless Ad-hoc/sensor networks. (Unit IV) K2
9. Understand how the various signal processing and coding techniques combat channel uncertainties (Unit V) K2
10. Evaluate the QoS related performance measurements of ad hoc and sensor networks with triangulation QoS (Unit V) K3

D. ELAVARASI

12/6/18

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CO - PO MAPPING

Adhoc and Sensor Networks

CO#	PO1(k3)	PO2(K4)	PO3(K5)	PO4(K5)	PO5(K3,K5)	PO6(K3)	PO7(K2)	PO8(K3)	PO9	PO10	PO11(K2)	PO12(2)
C405.1(K2)	2	1	0	0	1	0	0	0	0	0	0	0
C405.2(K2)	2	1	0	0	1	0	0	0	0	0	0	0
C405.3(K1)	1	0	0	0	0	0	0	0	0	0	0	0
C405.4(K2)	2	1	0	0	1	0	0	0	0	0	0	0
C405.5(K3)	3	2	1	1	3	0	0	0	0	0	0	0
C405.6(K2)	2	1	0	0	1	0	0	0	0	0	0	0
C405.7(K3)	3	2	1	1	3	0	0	0	0	0	0	0
C405.8(K2)	2	1	0	0	1	0	0	0	0	0	0	0
C405.9(K2)	2	1	0	0	1	0	0	0	0	0	0	0
C405.10(K3)	3	2	1	1	3	0	0	0	0	0	0	0
Course outcome	2.2	1.2	0.3	0.3	1.5	0	0	0	0	0	0	0

Y YEAR

OR Order of the subject in your curriculam

12/6/18

2018-19 (ODD SEMESTER)

V - SEMESTER

SATHYA M. AP/CSE

MOUNT ZION COLLEGE OF ENGINEERIN G AND TECHNOLOGY

COURSE OUTCOME

CS6002 – INFORMATION RETRIEVAL

C403.1 – Describe clustering algorithm for organization of data (K1).

C403.2 – Explain the components and functionalities of search engine (K2).

C403.3 – Explain the classification and regression model by using the Decision tree.

C403.4 – Describe the functions of search engine optimization (K2).

C403.5–DemonstarteHadoop and Map reduce techniques for huge data storage and processing (K2).

C403.6 – Apply Retrieval method for retrieving information by using Artificial Intelligence tool (K3).

C403.7 – Apply to measure the similarity of query and document in information retrieval by using vector space model(K3).

C403.8- Differentiate an approaches for usr item and item-iten=m which is used for collaborative filtering (K4).

C403.9 – Construct web index for efficient query processing(K6).

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CO - PO MAPPING

CS6002- Information Retrieval

CO#	PO1(k3)	PO2(K4)	PO3(K5)	PO4(K5)	PO5(K3,K5,K6)	PO6(K3)	PO7(K2)	PO8(K3)	PO9	PO10	PO11(K2)	PO12(2)
C406.1(K1)	1	0	0	0	1	0	0	0	0	0	0	0
C406.2(K2)	2	1	0	0	2	0	0	0	0	0	0	0
C406.3((K2)	2	1	0	0	2	0	0	0	0	0	0	0
C406.4(K2)	2	1	0	0	2	0	0	0	0	0	0	0
C406.5(K3)	3	2	1	1	3	0	0	0	0	0	0	0
C406.6(K3)	3	2	1	1	3	0	0	0	0	0	0	0
C406.7(K3)	3	2	1	1	3	0	0	0	0	0	0	0
C406.8(K4)	3	3	2	2	3	0	0	0	0	0	0	0
C406.9(K6)	3	2	3	3	3	0	0	0	0	0	0	0
Course outcome	2.444444	1.555556	0.888889	0.888889	2.444444444	0	0	0	0	0	0	0

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VIII TH sem

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

CS6801 -MULTI-CORE ARCHITECTURES AND PROGRAMMING

Course Code	Course Name	Course Outcome(CO) Students will be able to	Knowledge Level
CS6801	MULTI-CORE ARCHITECTURES AND PROGRAMMING	CO1: Understand fundamental of single core and multicore architecture.	K2
		CO2: Discuss the performance issues in Parallel program design.	K2
		CO3: Develop the program to handling data and functional parallelism using OpenMP.	K3
		CO4: Develop the program to perform point-to-point and collective communication using MPI.	K3
		CO5: Demonstrate the concept of OpenMP and MPI implementations and comparison.	K3

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K2	K3	K2	K5	K3/K5/K6	K3	K2	K3	K3	K2	K6	K6
C811.1	K2	3	2	3	-	2	2	3	2	2	3	-	-
C811.2	K2	3	2	3	-	-	2	3	2	2	3	-	-
C811.3	K3	3	3	3	1	-	3	3	3	3	3	-	-
C811.4	K3	3	3	3	1	-	3	3	3	3	3	-	-
C811.5	K3	3	3	3	1	-	3	3	3	3	3	-	-

12/12/18

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STAFF : RAMYA B.

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
REGULATION 2013
B.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name	Course Outcome(CO) Students will be able to	Knowledge Level
IT6011	Knowledge Management	CO1: Understand the basic purpose of knowledge techniques with management aspects.	K2
		CO2: Design the culture of leaning idea in an organization with help of knowledge sharing tools.	K2
		CO3: Develop the enterprise applications with tools and technology based data.	K3
		CO4: Apply the knowledge management application in different strategy of various set of data.	K3
		CO5: Demonstrate the various strategy of knowledge based ideas with an suitable application	K3

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K2	K3	K2	K5	K3/K5/K6	K3	K2	K3	K3	K2	K6	K6
C811.1	K2	3	2	3	-	2	2	3	2	2	3	-	-
C811.2	K2	3	2	3	-	-	2	3	2	2	3	-	-
C811.3	K3	3	3	3	1	-	3	3	3	3	3	-	-
C811.4	K3	3	3	3	1	-	3	3	3	3	3	-	-
C811.5	K3	3	3	3	1	-	3	3	3	3	3	-	-

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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2017
M.E CSE - COURSE OUTCOMES (CO)

CP5292 – INTERNET OF THINGS

Course Code	Course Name	Course Outcome(CO) Students will be able to	Knowledge Level
CP5292	INTERNET OF THINGS	CO1: Understand fundamental concept of IOT.	K2
		CO2: Discuss the security issues in IOT.	K2
		CO3: Develop the program of logical design using python.	K3
		CO4: Develop the program using Raspberry pi interface.	K3
		CO5: Demonstrate the concept of Real world design constructs.	K3

CO-PO MAPPING

COs		POs						
		PO1	PO2	PO3	PO4	PO5	PO6	PO7
		K2	K3	K2	K5	K3/K5/K6	K3	K2
C211.1	K2	3	2	3	-	2	2	3
C211.2	K2	3	2	3	-	-	2	3
C211.3	K3	3	3	3	1	-	3	3
C211.4	K3	3	3	3	1	-	3	3
C211.5	K3	3	3	3	1	-	3	3

3/1/19

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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY

ACADEMIC YEAR 2018-2019

COURSE CODE: CP5094

COURSE NAME: INFORMATION RETRIEVAL TECHNIQUES

YEAR/SEM: I/II

S.NO	COURSE OUTCOME	KNOWLEDGE LEVEL
C194.1	Employ an Information Retrieval system using the available tools	K3
C194.2	Identify and design the various components of an Information Retrieval system	K2
C194.3	Illustrate machine learning techniques to text classification and clustering which is used for efficient Information Retrieval	K3
C194.4	Compare an efficient search engine and analyze the Web content structure.	K4
C194.5	Demonstrate the various applications of information retrieval giving emphasis to multimedia IR, web search	K3

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K3	K3	K3	K3	K6	K2	K2	K2	K1	K1	K2
C194.1	K3	3	3	3	3	3	*	2	2	2	1	1	2
C194.2	K2	2	2	2	2	2	*	3	3	3	2	2	3
C194.3	K3	3	3	3	3	3	*	2	2	2	1	1	2
C194.4	K4	2	2	2	2	2	1	1	1	1	*	*	1
C194.5	K3	3	3	3	3	3	*	2	2	2	1	1	2

STAFF : SWAMINATHAN

3/1/19

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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2017
M.E CSE - COURSE OUTCOMES (CO)

Course Code&Course Name :CP5293–BIG DATA ANALYTICS

Course Outcome(CO) Students will be able to	Knowledge Level
CO1:Identify the characteristics of datasets and compare the trivial data andbig data for various applications.	K1
CO2:Understand machine learning techniques and computing environmentthat are suitable for the applications under consideration.	K2
CO3 :Solve problems associated with batch learning and online learning, and thebig data characteristics such as high dimensionality, dynamically growing data andin particular scalability issues.	K3
CO4 :Apply scaling up machine learning techniques and associatedcomputing techniques and technologies.	K3
CO5 :Recognize and implement various ways of selecting suitable model parametersfor different machine learning techniques.	K1
CO6 :Use machine learning libraries and mathematical and statistical toolswith modern technologies like Hadoop and mapreduce.	K3

CO-PO MAPPING

COs		POs											
		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
		K3	K4	K5	K5	K3/ K5/ K6	K4	K2	K3	K3	K2	K3	K3
CO1	**K1**	-	-	-	-	-	-	2	-	-	2	-	-
CO2	**K2**	2	1	-	-	2	1	3	2	2	3	2	2
CO3	**K3**	3	2	1	1	3	2	3	3	3	3	3	3
CO4	**K3**	3	2	1	1	3	2	3	3	3	3	3	3
CO5	**K1**	-	-	-	-	-	-	2	-	-	2	-	-
CO6	**K3**	3	2	1	1	3	2	3	3	3	3	3	3

STAFF : SANGEETHA

3/1/19

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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE
REGULATION 2017
M.E CSE - COURSE OUTCOMES (CO)

Course Code	Course Name		Course Outcome(CO) Students will be able to	Knowledge Level
CP5201	NETWORK DESIGN AND TECHNOLOGIES	C201.1	Identify the components required for designing a network	K1
		C201.2	Design a network at a high-level using different networking technologies	K3
		C201.3	Analyze the various protocols of wireless and cellular networks	K4
		C201.4	Discuss the features of 4G and 5G networks	K2
		C201.5	Experiment with software defined networks	K3

CO-PO MAPPING

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K4	K5	K5	K3	K4	K2	K3	K3	K2	K3	K3
C360.1	K1	1	-	-	-	1	-	-	-	-	-	-	-
C360.2	K3	3	2	1	1	3	-	-	-	-	-	-	-
C360.3	K4	2	3	1	1	2	-	-	-	-	-	-	-
C360.4	K2	2	1	-	-	2	-	-	-	-	-	-	-
C360.5	K3	3	2	1	1	3	-	-	-	-	-	-	-

P. Rolift

3/1/19

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MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY

ACADEMIC YEAR 2018-2019

COURSE CODE: CP5092

COURSE NAME: CLOUD COMPUTING AND TECHNOLOGIES

YEAR/SEM: I/II

S.NO	COURSE OUTCOME	KNOWLEDGE LEVEL
C192.1	Employ the concepts of storage virtualization network virtualization and its management	K3
C192.2	Apply the concept of virtualization in the cloud computing	K3
C192.3	Identify the architecture, infrastructure and delivery models of cloud computing	K2
C192.4	Develop services using Cloud computing	K6
C192.5	Apply the security models in the cloud environment	K3

COs		POs											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
		K3	K3	K3	K3	K3	K6	K2	K2	K2	K1	K1	K2
C192.1	K3	1	1	1	1	1	3	2	2	2	2	2	2
C192.2	K3	1	1	1	1	1	3	2	2	2	2	2	2
C192.3	K2	*	*	*	*	*	3	1	1	1	1	1	1
C192.4	K6	*	*	*	*	*	1	*	*	*	*	*	*
C192.5	K3	1	1	1	1	1	*	1	1	1	1	1	1

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