J.B. INSTITUTE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)



ACADEMIC YEAR 2015-16

http://www.jbiet.edu.in



COURSE PLAN

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR Designation: Assistant Professor

Department:: IT

COURSE DETAILS

Name Of The Programme:: B.Tech
Designation:: IV-B.Tech Batch:: 2012

Year 2015-16 Semester II

Department:: IT

CLOUD
Title of The Subject COMPUTING
No of Students 112 Subject Code 58065



COURSE PLAN

2015-16

Regulation: R12

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Name of the Faculty:: B.VIJAY KUMAR

Designation: Assistant Professor

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a) Percentage Pass 100

b) Percentage I class 100

2. COURSE PLAN

(Please write how you intend to cover the contents: i.e., coverage of Units by lectures, guest lectures, design exercises, solving numerical problems, demonstration of models, model preparation, or by assignments, etc.) I intending to coverage of Units by lectures, model preparation and assignments.

3. METHOD OF EVALUATION

3.1.	Continuous Assessment Examinations (CAE 1, CAE 2)
3.2.	Assignments / Seminars
3.3.	Mini Projects
3.4.	□ Quiz
3.5.	Term End Examination
36	Others

4. List out any new topic(s) or any innovation you would like to introduce in teaching the subject in this Semester.

Signature of HOD Date:

Signature of Faculty

Date:





GUIDELINES TO STUDY THE SUBJECT

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR Designation: Assistant Professor

Department:: IT

Guidelines for Preparing the Course:

Course Description:

Perl, PHP, TCL/Tk, Phython -- they are often-requested skills for employment, but most of us do not have the time to find out what they are all about. In this course, you learn how to use scripting languages for rapid prototyping, web programming, data processing, and application extension. Besides covering traditional programming languages concepts as they apply to scripting (e.g., dynamic typing and scoping), this course looks at new concepts rarely found in traditional languages (e.g., string interpolation, hashes, and polylingual code). Through a series of small projects, you use different languages to achieve programming tasks that highlight the strengths and weaknesses of scripting. As a side effect, you practice teaching yourself new languages.

Course Objectives:

- 1. The objective of this course is to provide graduate students of B. Tech Information Technology with the comprehensive and in-depth knowledge of Cloud Computing concepts, technologies, architecture and applications by introducing and researching state-of-the-art in Cloud Computing fundamental issues, technologies, applications and implementations.
- 2. Another objective is to expose the students to frontier areas of Cloud Computing and information technology, while providing sufficient foundations to enable further study and research.

Learning Outcomes:

- 1.
- 2.
- 3. Understanding of basic CLOUD COMPUTING



COURSE OUTCOMES

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR
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Department:: IT

The expected outcomes of the Course / Subject are:

S.No.	General Categories of Outcomes	Specific Outcomes of the Course
A.	An ability to apply knowledge of mathematics, science, and engineering	
В.	An ability to design and conduct experiments, as well as to analyze and interpret data	
C.	An ability to design a system, component, or process to meet desired needs within realistic Constraints such as economic, environmental, social, political, ethical, health and safety, Manufacturability and sustainability	
D.	An ability to function on multi-disciplinary teams	
E.	An ability to identify, formulate, and solve engineering problems	
F.	An understanding of professional and ethical responsibility	
G.	An ability to communicate effectively	
Н.	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	
I.	A recognition of the need for, and an ability to engage in life-long learning	
J.	A knowledge of contemporary issues	
K.	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	

Objectives – Outcome Relationship Matrix (Indicate the relationships by mark).

Outcomes Objectives	Α	В	C	D	Е	F	G	H	-	٦	K
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											



COURSE SCHEDULE

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR
Designation: Assistant Professor

Department:: IT

The Schedule for the whole Course / Subject is:: 65 periods

C No	Description	Durat	tion (Date)	Total No.
S. No.	Description	From	То	of Periods
1.	Introductory Concepts and Overview	14/12/1 5	23/12/15	7
2.	Overview of Cloud Computing .	23/12/15	4/1/16	8
3.	Web services delivered from the cloud	6/1/16	25/1/16	9
	Federation Presence, Identity and Privacy in the Cloud	27/1/16	5/2/16	8
5.	Common standards in Cloud computing ·	15/2/16	27/2/16	8
6.	End user access to cloud computing ·	29/2/16	12/3/16	8
7	Virtualization .	14/3/16	26/3/16	8
8	Cloud Computing case studies 2	28/3/16	9/4/16	8

Total No. of Instructional periods available for the course: Hours / Periods

Text Book:

TB1: Cloud computing Implementation, management and Security by John W. Rittinghouse, James F. Ransome, CRC Press, Taylor & Francis group, 2010

TB2: Cloud Computing a practical Approach by Anthony T. velte, Toby J.velte Robert Elsenpeter, Tata Mc Graw Hill edition, 2010

Reference:

RB1: Cloud Application Architectures by George Reese, Oreilly publishers



UNIT - I

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR Designation: Assistant Professor

Department::IT

The Schedule for the whole Course / Subject is:: 7

SI. No.	Date	No. o Period	LODICS / SUD - LODICS	Objectives & Outcome Nos.	References (Text Book, Journal) Page No to
1	14-12-2015	1	Disrtibuted parallel Computing Architectures	1	ГВ1
2	16-12-2015	2	Vector processingSymmetric multi processingMassively parallel processing systems	1	TB1
3	18-12-2015	1	High performance Cluster computing	1	TB1
4	18-12-2015	1	Grid Computing	1	TB1, RB1
5	21-12-2015	1	Service Oriented Architecture overview	1, 2	TB1
6	23-12-2015	1	Virtualization	1, 2	TB1, RB1

Signature of Faculty Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.

- 2.ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**.
 3.MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.



UNIT - II

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR Designation: Assistant Professor

Department::IT

The Schedule for the whole Course / Subject is:: 8

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal) Page No to
1	23-12-2015	1	Meaning of the terms cloud and cloud computing	1	TB1
2	28-12-2015	2	Cloud based service offering	1	ТВ1
3	30-12-20151		Grid Computing Vs Cloud Computing	1	ТВ1
		4	Benefits of cloud model Limitations Legal issues		
4	30-12-2015	1		1	TB1, RB1
5	1-1-2016	1	Key characteristics of cloud computing Challenges for the cloud	1, 2	TB1
6	4-1-2016	2	The evolution of cloud computing	1, 2	TB1, RB1

Signature of Faculty Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.



UNIT - III

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR
Designation: Assistant Professor

Department::IT

The Schedule for the whole Course / Subject is:: 9

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal) Page No to
			Infrastructure as a service		
1	6-1-2016	1		1	TB3
2	8-1-2016	2	Platform as a service		TB3
	8-1-2016	1	Software as a service	1	TB3
4	11-1-2016	1	Building Cloud networks	1	TB3
5	18-1-2016	2	Evolution from the MSP model to cloud computing and software as a service	1, 2	TB3
6	20-1-2016	2	The Cloud data center – SOA as step toward cloud computing	1,2	ТВ3
7	22-1-2016	2	Basic approach to a data center based SOA	1,2	ТВ3

Signature of Faculty Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.

2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**.

MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.



UNIT - IV

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR Designation: Assistant Professor

Department::IT

The Schedule for the whole Course / Subject is:: 8

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal) Page No to
1	27-1-2016	1	Federation in the cloud	1	TB3
2	27-1-2016	1	Presence in the cloud	1	TB3
3	29-1-2016	2	Privacy and its relation to cloud based information system	1,2	ТВ3
4	29-1-2016	2	Security in the Cloud	1	ТВ3
5	1-2-2016	2	Cloud security challenges	1, 2	TB3
6	3-2-2016	2	Software as a service security	1,2	ТВ3

Signature of Faculty Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.



UNIT - V

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR Designation: Assistant professor

Department::IT

The Schedule for the whole Course / Subject is:: 9

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal) Page No to
1	15-1-2016	2	The open cloud consortium	1	TB1
2	16-1-2016	1	Distributed management task force	1	TB1
3	17-1-2016	2	Standards for application developers	1	TB1
4	18-1-2016	2	Standards for messaging	1	TB1
5	19-2-2016	2	Standards for security	1, 2	TB1

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.

2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**.

MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.



2015-16

UNIT - VI

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.vijay kumar D esignation: Assistant Professor

Department:: IT

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal) Page No to
			Youtube		
			Zimbra		
1	23-2-2016	1		1	TB1
			Facebook		
			Zoho		
			DimDim Collaboration		
2	24-2-2016	2		1	TB1
		_	Mobile internet and the cloud :		
3	25-2-2016	2	Smartphone –mobile operating	1	TB1
4	2 . 2 201 .	1	Nachila Diatana vistualizatian	1	TD 4
4	26-2-2016	1	Mobile Platform virtualization	1	TB1
_			Collaboration applications for mobile	1 2	
5	27-2-2016	2	platforms	1, 2	TB1
6		1	Future Trends		
U		1	ruture riellus	Ц	

Signature of Faculty Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.



UNIT - VII

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR Designation: Assistant Professor

Department::IT

The Schedule for the whole Course / Subject is:: 10

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal) Page No to
	28-2-2016	1	Adding guest Operating system	1	TB2
2	28-2-2016	1	Cloud computing case studies : Amazon EC2	1	TB2
3	1-3-2016	1	Amazon simple DB	1	TB2
4	5-3-2016	1	Amazon Cloud Front	. 1	TB2, RB2
5	8-3-2016	1	Amazon SQS	1	TB2

Signature of Faculty Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.



UNIT - VIII

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR Designation: Asssistant Professor

Department:: IT

The Schedule for the whole Course / Subject is:: 6

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal) Page No to
			Google App Engine Google web toolkit		
1	28-2-2016	1		1	TB2
			Microsoft Azure Services platform Windows Live Exchange Online Sharepoint services Microsoft dynamic CRM		
2	28-2-2016	4		1	TB2
			Salesforce.com CRM App Exchange		
3.		1		1	TB2

Signature of Faculty Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.



COURSE COMPLETION STATUS

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B VIJAY KUMAR
Subject:: cc Subject Code 58065 Department:: IT

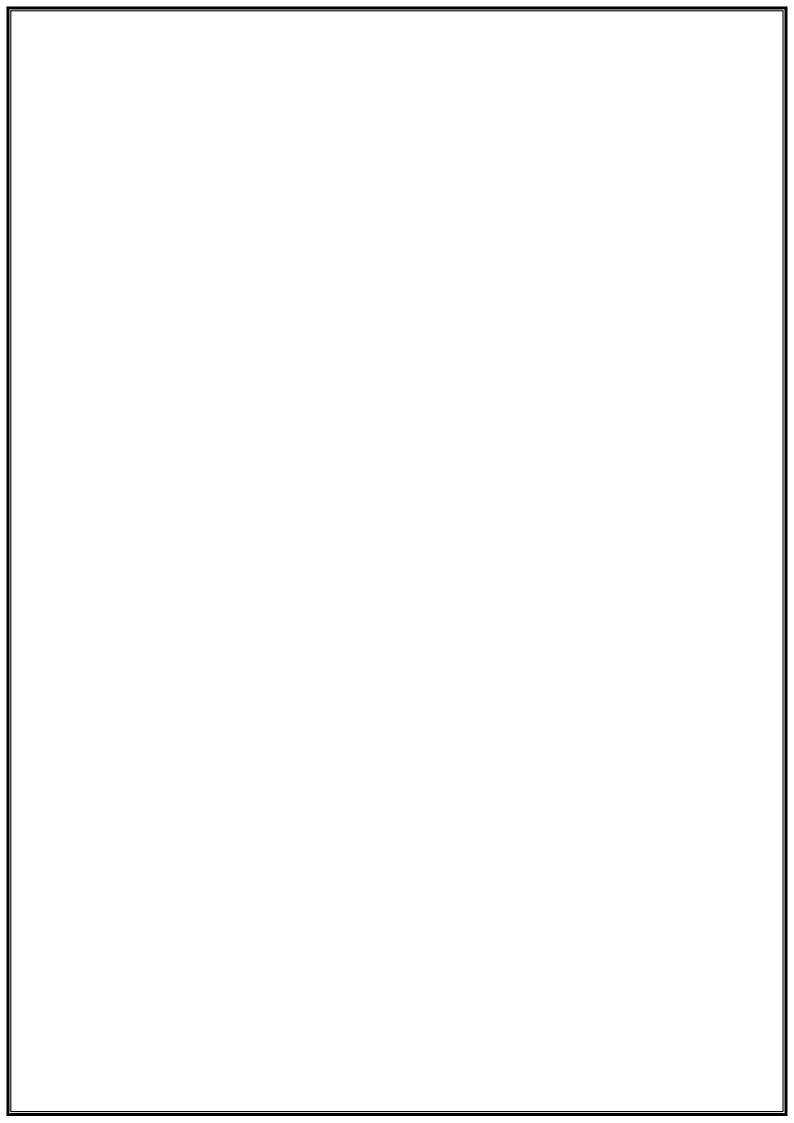
Actual Date of Completion & Remarks, if any

Units		Remarks	•	Nos. of Objectives Achieved
Unit 1	30/12/15			2
Unit 2 Unit 3	21/1/13			2
Unit 4	31/1/12			4
Unit 5	6/2/13			3
	18/2/16		<u></u>	1
Unit 6	27/2/16			1
Unit 7	15/3/16			2
Unit 8	3/4/16			2

Signature of Dean of School Date:

Signature of Faculty **Date:**

NOTE: AFTER THE COMPLETION OF EACH UNIT MENTION THE NUMBER OF OBJECTIVES ACHIEVED.





TUTORIAL SHEETS - I

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR

Designation: Assistant Professor

Department:: IT

The Schedule for the whole Course / Subject is:: CC

Date:

This Tutorial corresponds to Unit Nos. I, II, III and IV

Time:

- 1. Write about any 2 various Parallel computing Architectures
- 2. What are the key characteristics of cloud computing
- 3. What are the benefits and limitations of cloud computing
- 4. Explain any 2 of the following
 - a) Infrastructure as a service
 - b) Platform as a service
 - c) Software as a service
- 5. Write about security in the cloud

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School Date:

Signature of Faculty

Date:



TUTORIAL SHEETS - II

2015-16

Regulation: R12

FACULTY DETAILS:

Name of the Faculty:: B.VIJAY KUMAR

Designation: Assistant Professor

Department:: IT

The Schedule for the whole Course / Subject is:: CC

Date: Time:

This Tutorial corresponds to Unit Nos. V, VI, VII and VIII

1. What are the standards for messaging

2. Write about any 2

- a. Youtube
- b. Facebook
- c. Zoho
- 3. What about Smartphones
- 4. Explain any 2 of the following
 - a) Amazon EC2
 - b) Amazon Cloud Front
 - c) Amazon SQS
- 5. Write about

Google App Engine

b) Google Web Toolkit

Signature of Faculty Date:

Date:



ILLUSTRATIVE VERBS FOR STATING INSTRUCTIONAL OBJECTIVES

2015-16

Regulation: R12

These verbs can also be used while framing questions for Continuous Assessment Examinations as well as for End – Semester (final) Examinations.

<u>ILLUSTRATIVE VERBS FOR STATING GENERAL OBJECTIVES</u>

Know	Understand	Analyze	Generate
Comprehend	Apply	Design	Evaluate

ILLUSTRATIVE VERBS FOR STATING SPECIFICOBJECTIVES:

A. Cognitive Domain					
1	2	3	4	5	6
Knowledge	Comprehension Understanding	Application	Analysis	Synthesis	Evaluation
		of knowledge & comprehension	of whole w.r.t. its constituents	combination of ideas/constituents	judgement
Define	Convert	Change	Breakdown	Categorize	Appraise
Identify	Defend	Compute	Differentiate	Combine	Compare
Label	Describe (a	Demonstrate	Discriminate	Compile	Conclude
List	procedure)	Deduce	Distinguish	Compose	Contrast
Match	Distinguish	Manipulate	Separate	Create	Criticize
Reproduce	Estimate	Modify	Subdivide	Devise	Justify
Select	Explain why/how	Predict		Design	Interpret
State	Extend	Prepare		Generate	Support
	Generalize	Relate		Organize	
	Give examples	Show		Plan	
	Illustrate	Solve		Rearrange	
	Infer			Reconstruct	
	Summarize			Reorganize	
				Revise	

B. Affective	e Domain		C. Psychomotor Domain (skill development)			
Adhere	Resolve	Bend	Dissect	Insert	Perform	Straighten
Assist	Select	Calibrate	Draw	Keep	Prepare	Strengthen
Attend	Serve	Compress	Extend	Elongate	Remove	Time
Change	Share	Conduct	Feed	Limit	Replace	Transfer
Develop		Connect	File	Manipulate	Report	Туре
Help		Convert	Grow	Move precis	selyReset	Weigh
Influence		Decrease	Handle	Operate	Run	
Initiate		Demonstrate	Increase	Paint	Set	