

# Lesson Plan

**Name of faculty :** Er.parul

**Discipline :** Computer Engineering

**Semester :** 6

**Subject :** Distributed Computing

**Lesson Plan Duration:** 15 Weeks (from January, 2018 to April, 2018)

**Work Load(Lecture/ Practical) per week (in hours):** Lectures-03, Practicals – Nil

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical Day N/A	Topic N/A
1st	1st	Overview of Cloud Computing		
	2nd	Overview of Cloud Computing		
	3rd	Overview of Cloud Computing		
2 <sup>nd</sup>	4 <sup>th</sup>	Characteristics of Cloud Computing		
	5 <sup>th</sup>	Characteristics of Cloud Computing		
	6 <sup>th</sup>	Advantages of Cloud Computing		
3rd	7 <sup>th</sup>	Advantages of Cloud Computing		
	8 <sup>th</sup>	Challenges of Cloud Computing		
	9 <sup>th</sup>	Challenges of Cloud Computing		
4 <sup>th</sup>	10 <sup>th</sup>	Applications of Cloud Computing		
	11 <sup>th</sup>	Applications of Cloud Computing		
	12 <sup>th</sup>	SaaS Service Model		
5 <sup>th</sup>	13 <sup>th</sup>	SaaS Service Model		
	14 <sup>th</sup>	PaaS Service Model/ Assignment		
	15 <sup>th</sup>	PaaS Service Model		
6 <sup>th</sup>	16 <sup>th</sup>	IaaS Service Model		
	17 <sup>th</sup>	Private Cloud Deployment Model		
	18 <sup>th</sup>	Private Cloud Deployment Model		
7 <sup>th</sup>	19 <sup>th</sup>	Public Cloud Deployment Model		
	20 <sup>th</sup>	Public Cloud Deployment Model		
	21 <sup>st</sup>	Hybrid Cloud Deployment Model		

8 <sup>th</sup>	22 <sup>nd</sup>	Community Cloud Deployment Model		
	23 <sup>rd</sup>	Overview of Grid Computing		
	24 <sup>th</sup>	Overview of Grid Computing		
9 <sup>th</sup>	25 <sup>th</sup>	Overview of Grid Computing		
	26 <sup>th</sup>	Overview of Grid Computing		
	27 <sup>th</sup>	Advantages of Grid Computing		
10 <sup>th</sup>	28 <sup>th</sup>	Advantages of Grid Computing		
	29 <sup>th</sup>	Virtual Organizations /Assignment		
	30 <sup>th</sup>	Virtual Organizations		
11 <sup>th</sup>	31 <sup>st</sup>	Virtual Organizations		
	32 <sup>nd</sup>	Applications of Grid Computing		
	33 <sup>rd</sup>	Applications of Grid Computing		
12 <sup>th</sup>	34 <sup>th</sup>	Applications of Grid Computing		
	35 <sup>th</sup>	Cluster Computing		
	36 <sup>th</sup>	Cluster Computing		
13 <sup>th</sup>	37 <sup>th</sup>	Peer to Peer Networks		
	38 <sup>th</sup>	Peer to Peer Networks		
	39 <sup>th</sup>	Peer to Peer Networks		
14 <sup>th</sup>	40 <sup>th</sup>	Utility Computing/ Assignment		
	41 <sup>st</sup>	Utility Computing		
	42 <sup>nd</sup>	Ubiquitous Computing		
15 <sup>th</sup>	43 <sup>rd</sup>	Ubiquitous Computing		
	44 <sup>th</sup>	Comparison of Grid, Cluster and Ubiquitous Computing		
	45 <sup>th</sup>	Comparison of Grid, Cluster and Ubiquitous Computing		

## Lesson Plan

Name of the Faculty : Mr. .Sanjeev Kumar

Discipline : Computer Engineering

Semester : 6<sup>th</sup>

Subject : **ENTREPRENEURSHIP DEVELOPMENT AND MANAGEMENT**

Lesson Plan duration : 15 weeks (from January, 2018 to April, 2018)

Work load per week : Lecture – 03

Week	Theory	
	Lecture Day	Topic (Including assessment/test)
1 <sup>st</sup>	1 <sup>st</sup>	Introduction: Concept /Meaning and need of entrepreneurship
	2 <sup>nd</sup>	Qualities and functions of entrepreneur and barriers in entrepreneurship
	3 <sup>rd</sup>	Sole proprietorship and partnership forms of business organization
2 <sup>nd</sup>	4 <sup>th</sup>	Schemes of assistance by entrepreneurial support agencies at National level organization
	5 <sup>th</sup>	Schemes of assistance by entrepreneurial support agencies at State level organization
	6 <sup>th</sup>	Schemes of assistance by entrepreneurial support agencies at District level organization
3 <sup>rd</sup>	7 <sup>th</sup>	NSIC, NRDC, DC
	8 <sup>th</sup>	MSME, SIDBI
	9 <sup>th</sup>	Commercial Banks, SFC's TCO
4 <sup>th</sup>	10 <sup>th</sup>	KVIB, DIC
	11 <sup>th</sup>	Technology Business Incubators (TBI) Science and Technology
		Entrepreneur Parks
	12 <sup>th</sup>	Market Survey and Opportunity Identification: Scanning of the business environment
5 <sup>th</sup>	13 <sup>th</sup>	Salient features of National and State industrial policies and resultant business opportunities
	14 <sup>th</sup>	Supply in potential areas of growth,
	15 <sup>th</sup>	Types and conduct of market survey & Assessment of demand
6 <sup>th</sup>	16 <sup>th</sup>	Identifying business opportunity, Considerations in product selection
	17 <sup>th</sup>	1 <sup>st</sup> sessional test (Tentative)
	18 <sup>th</sup>	Assessment
7 <sup>th</sup>	19 <sup>th</sup>	Project report Preparation
	20 <sup>th</sup>	Preliminary project report

	21 <sup>st</sup>	Detailed project report including technical, economic
8 <sup>th</sup>	22 <sup>nd</sup>	Detailed project report including market feasibility
	23 <sup>rd</sup>	Common errors in project report preparations
	24 <sup>th</sup>	Exercises on preparation of project report
9 <sup>th</sup>	25 <sup>th</sup>	Introduction to Management: Definitions and importance of management, Functions of management
	26 <sup>th</sup>	Importance and process of planning, organizing, staffing, directing and controlling, Principles of management (Henri Fayol, F.W. Taylor)
	27 <sup>th</sup>	Concept and structure of an organization & Line organization, Line and staff organization & Functional Organisation
10 <sup>th</sup>	28 <sup>th</sup>	2 <sup>nd</sup> sessional test (Tentative)
	29 <sup>th</sup>	Assessment
	30 <sup>st</sup>	Leadership: Definition and Need, Qualities and functions of a leader, Manager Vs leader, Types of leadership
11 <sup>th</sup>	31 <sup>nd</sup>	Motivation: Definitions and characteristics, Factors affecting motivation
	32 <sup>rd</sup>	Theories of motivation (Maslow, Herzberg, Douglas, McGregor)
	33 <sup>th</sup>	Human Resource Management: Introduction and objective, Introduction to Man power planning, recruitment and selection
12 <sup>th</sup>	34 <sup>th</sup>	Introduction to performance appraisal methods
	35 <sup>th</sup>	Material and Store Management: Introduction functions, and objectives of ABC Analysis and EOQ
	36 <sup>th</sup>	Marketing and sales : Introduction, importance, and its functions, Physical distribution,
13 <sup>th</sup>	37 <sup>th</sup>	Financial Management: Introductions, importance and its functions
	38 <sup>th</sup>	Elementary knowledge of income tax, sales tax, excise duty, custom duty and VAT,
	39 <sup>th</sup>	Customer Relation Management (CRM): Definition and need, Types of CRM
14 <sup>th</sup>	40 <sup>st</sup>	process control, Total employees Involvement
	41 <sup>th</sup>	Just in time (JIT)
	42 <sup>rd</sup>	Intellectual Property Right (IPR): Introductions, definition and its importance, Infringement related to patents, copy right, trade mark
15 <sup>th</sup>	43 <sup>th</sup>	3 <sup>rd</sup> sessional test (Tentative)
	44 <sup>th</sup>	Assessment
	45 <sup>th</sup>	Revision

### Lesson Plan

**Name of the Faculty** : Ms. Ramanpreet Kaur

**Discipline** : Computer Engg.

**Semester** : 6<sup>th</sup>

**Subject** : Network Security

**Lesson Plan Duration** : 15 weeks (from January, 2018 to April, 2018)

**Work Load (Lecture / Practical) per week (in hours): Lectures-03, Practical-03**

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical Day	Topic
1 <sup>st</sup>	1 <sup>st</sup>	Need for securing a network	1 <sup>st</sup>	Study of various hacking tools.
	2 <sup>nd</sup>	Principles of Security, Type of attacks		
	3 <sup>rd</sup>	Introduction to cyber crime, Cyber law-Indian Perspective (IT Act 2000 and amended 2008)		
2 <sup>nd</sup>	4 <sup>th</sup>	Cyber ethics, Ethical hacking		
	5 <sup>th</sup>	What is hacking?		
	6 <sup>th</sup>	Attacker, Phreaker		
3 <sup>rd</sup>	7 <sup>th</sup>	Introduction to basic encryption and decryption	2 <sup>nd</sup>	Writing program in C to Encrypt/ Decrypt using XOR key
	8 <sup>th</sup>	Concept of symmetric and asymmetric key cryptography		
	9 <sup>th</sup>	Overview of DES,		
4 <sup>th</sup>	10 <sup>th</sup>	Overview of RSA		
	11 <sup>th</sup>	Overview of PGP		
	12 <sup>th</sup>	Introduction to Hashing		
5 <sup>th</sup>	13 <sup>th</sup>	Introduction to MD5		

Week	Theory		Practical			
	Lecture day	Topic (including assignment / test)	Practical Day	Topic		
	14 <sup>th</sup>	Introduction to SSL (Secure Sockets Layer)				
	15 <sup>th</sup>	Introduction to SSH (Secure Shell)				
	16 <sup>th</sup>	Introduction to HTTPS (Hyper Text Transfer Protocol Secure)				
6 <sup>th</sup>	17 <sup>th</sup>	Digital Signature	3 <sup>rd</sup>	Practical applications of digital signature.		
	18 <sup>th</sup>	Digital Certification, IPSec				
7 <sup>th</sup>	19 <sup>th</sup>	Definitions Virus, Worms and Trojans	4 <sup>th</sup>	Installation and comparison of various anti virus software		
	20 <sup>th</sup>	Preventive measures access central				
	21 <sup>st</sup>	Checksum verification				
8 <sup>th</sup>	22 <sup>nd</sup>	Process configuration,				
	23 <sup>rd</sup>	Virus scanners				
	24 <sup>th</sup>	Heuristic scanners				
9 <sup>th</sup>	25 <sup>th</sup>	Application level virus scanners				
	26 <sup>th</sup>	Deploying virus protection				
	27 <sup>th</sup>	Definition and types of firewalls				
10 <sup>th</sup>	28 <sup>th</sup>	Firewall configuration	5 <sup>th</sup>	Installation and study of various parameters of firewall		
	29 <sup>th</sup>	Firewall configuration				
	30 <sup>th</sup>	Limitations of firewall				
11 <sup>th</sup>	31 <sup>st</sup>	Introduction to Intrusion Detection System (IDS) IDS limitations				
	32 <sup>nd</sup>	Teardrop attacks				
	33 <sup>rd</sup>	Counter measures, Host based IDS set up				
12 <sup>th</sup>	34 <sup>th</sup>	Handling Cyber Assets				
	35 <sup>th</sup>	Configuration policy as per standards				
	36 <sup>th</sup>	Disposable policy				
13 <sup>th</sup>	37 <sup>th</sup>	Basics of Virtual Private Network (VPN)			6 <sup>th</sup>	Study of VPN
	38 <sup>th</sup>	Setting of VPN				
	39 <sup>th</sup>	VPN diagram				
14 <sup>th</sup>	40 <sup>th</sup>	Configuration of required objects,				
	41 <sup>st</sup>	Exchange Keys, Modifying security policy				

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical Day	Topic
15 <sup>th</sup>	42 <sup>nd</sup>	Disaster categories network disasters server disasters		
	43 <sup>rd</sup>	Cabling, topology, single point of failure		
	44 <sup>th</sup>	Save configuration files, UPS, RAID,		
	45 <sup>th</sup>	Clustering, Backups, server recovery		

### Lesson Plan

Name of Faculty : Ms. Ramanpreet Kaur  
 Discipline : Computer Engineering  
 Semester : VI  
 Subject : Programming in JAVA  
 Lesson Plan Duration : 15 Weeks ( From January 2018 to April 2018 )

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test )	Practical Day	Topic
1 <sup>st</sup>	1	1. A brief history 2. How Java works? 3. Java features	1	PRACTICAL 1- Write a program which tells whether a number is even or odd. Take a range from 1–50
	2	1. Java Virtual Machine (JVM) 2. Java In Time (JIT)		
	3	1. Using Java with other tools		
2 <sup>nd</sup>	4	1. Native code 2. Java application types	2	PRACTICAL 2- Write a programme to convert the given temperature in Fahrenheit to Celsius
	5	1. Comparison with C and C++		
	6	Revision of chapter 1		
3 <sup>rd</sup>	7	Test of chapter 1	3	PRACTICAL 3 - Write a programme to find all the numbers and sum of all integers greater than 100 less than 200 that are divisible by 7
	8	1. Working with data types		
	9	1. Control flow statements		
4 <sup>th</sup>	10	1. Control flow statements contd.	4	PRACTICAL 4- Given a list of marks ranging from 0 to 100, write a programme to compute and print the number of student should have obtained marks
	11	1. Array		
	12	1. Array Contd.		
5 <sup>th</sup>	13	Sessional test-1	5	PRACTICAL 5- Admission to a professional course is subject to the following conditions:
	14	1. Casting		
	15	1 Command line arguments		
6 <sup>th</sup>	16	Revision of chapter 2	6	Revision PRACTICAL 1-5
	17	Test chapter 2		
	18	1. Introduction to Classes		
7 <sup>th</sup>	19	1. Inheritance	7	PRACTICAL 6- Write programme using a do ..... while loop to calculate and print the first m ibonacci numbers
	20	1. Encapsulation		
	21	1. Polymorphism		
8 <sup>th</sup>	22	1. Constructors and finalizers	8	PRACTICAL 7- Write a programme to evaluate the following investment equation $V=P(1+r)^n$
	23	1. Garbage collection, access specifier		
	24	Revision of chapter 3		



9 <sup>th</sup>	25	Test of chapter 3	9	PRACTICAL 8- Write a program which will store the students roll no. names and total marks in the database
	26	Sessional test-2		
	27	1. Using Java interface		
10 <sup>th</sup>	28	1. Using Java packages	10	PRACTICAL 9- Write a program which will display all those records whose marks are above 75%
	29	Test of chapter 4		
	30	1. Over view of exception handling		

11 <sup>th</sup>	31	1. Method to use exception handling	11	PRACTICAL 10- Write a programme to draw the following using Applet:
	32	1. Method available to exceptions		
	33	1. Creating your own exception classes		
12 <sup>th</sup>	34	Revision chapter 5	12	PRACTICAL 11- Exercises on implementing Java Classes
	35	Test of chapter 5		
	36	1. Threads and Multi-threading overview 2. Thread basics		
13 <sup>th</sup>	37	1. The thread control methods	13	PRACTICAL 12- Exercises on exceptional handling
	38	1. The threads life cycle and synchronization		
	39	Test of chapter 6		
14 <sup>th</sup>	40	1. Java applets Vs Java applications	14	PRACTICAL 13- Exercises on creating and running threads
	41	1. Building application with JDK		
	42	1. Building applets with JDK, HTML for Java applets		
15 <sup>th</sup>	43	1. Managing input-output stream Revision of chapter 7	15	Revision PRACTICAL 6-13
	44	Test of chapter 7		
	45	Sessional test-3		