	Cloud Computing
SOURCE: 01	Cloud Computing
01	Cloud Computing Introduction   Basic Structure of Cloud Computing
02	Cloud Computing Working Models   Deployment and Service Models
03	Cloud Computing Benefits   Risks, Limitations, Components   Types of Cloud Environment
04	Cloud Computing Characteristics
05	Public Cloud Model   Introduction   Advantages, Disadvantages
06	Private Cloud Model   Introduction   Advantages, Disadvantages
07	Hybrid Cloud Model   Introduction   Advantages, Disadvantages
08	Community Cloud Model   Introduction   Advantages, Disadvantages
09	Cloud Computing Architecture   Font End and Back End
10	Cloud Computing Infrastructure   Hypervisor Introduction
11	Cloud Computing Technologies   Virtualization, SOA, Grid Computing and Utility Computing
12	SaaS - Cloud Computing   Software as a Service   Application, Characteristics, Benefits, Issues
13	Pass – Cloud Computing   Platform as a service   Types, Characteristics, Benefits, Issues
14	<u>laaS – Cloud Computing   Infrastructure as a Service   Characteristics, Benefits, Issues</u>
15	Cloud Computing Client Server Technology   Advantages, Disadvantages
16	Cloud Computing Peer to Peer Computing   Advantages, Disadvantages
17	Cloud Computing Distributed computing   Advantages, Disadvantages
18	Cloud Computing GRID Computing   Advantages   Evolution of Cloud Computing
19	Autonomic and Parallel Computing   Architecture
20	Cloud Computing Applications   Business, Data Storage and Backup, Management, Social etc
21	Cloud Computing Challenges   Cost, Reliability, Downtime, Security, Privacy, Lock-In
22	Cloud Computing Operations   Cloud Computing Providers
23	Cloud Computing Virtualization, Hardware Virtualization   Characteristics
24	Types of Hardware Virtualization   Reference Model, Advantages
25	Cloud Computing Security   Boundaries, Protecting Data Mechanism, Brokered Cloud Storage Access
26	Cloud Computing Security Concerns   Threats in Cloud Computing Security
27	IMA (Identify and Access Management)   Cloud Computing Security Mechanism
28	PKI (Public Key Infrastructure)   Cloud Computing Security Mechanism
29	Encryption (Symmetric vs Asymmetric)   Cloud Computing Security Mechanism
30	Single Sign On (SSO)   Cloud Computing Security Mechanism
31	Direct I/O Access Architecture   Specialized Cloud Architecture
32	Load Balanced Virtual Switches Architecture   Specialized Cloud Architecture
33	Multipath Resource Access Architecture   Specialized Cloud Architecture
34	Federated Cloud   Introduction, Advantages
35	Cloud Mobility   Introduction, Advantages, Benefits
36	Cloud Based ERP Software   Introduction, Advantages, Benefits
37	Cloud Based CRM Software   Introduction, Advantages, Benefits
38	Cloud Based Supply Chain Management (SCM) Software   Introduction, Benefits
39	Mobile Cloud Computing (MCC)   Architecture, Advantages, Issues, Applications
40	<u>Virtual Machine Provisioning   Life Cycle, VM Provision Process</u>

Google Cloud		
SOURCE: 01	Google Cloud Essentials	
01	What is Google Cloud	
02	Getting Stated with Google Cloud	
03	Machine Learning on Google	
04	How to Run Code on Google Cloud	
05	How to Store Data on Google Cloud	
06	How to Use The Google Cloud Free Program	
07	How to Use the Google Cloud Console	
08	<u>Platform Overview – Code and Build Tools</u>	
09	Debugging, Distributed Tracing, and Profiling for Web Applications	
10	Error Reporting	
11	Cloud Logging	
12	GCP vs Firebase – Functions and Fire-store	
13	GCP vs Firebase – Projects and Storage	
14	Top 3 Ways to Run Your Containers on Google Cloud	
15	GCP Staying in Touch	
16	Hands-on GCP	
17	Platform Overview – Data and Storage	
18	<u>Platform Overview – Serverless</u>	
19	Platform Overview – Machine Learning	
20	<u>Platform Overview – Compute</u>	
21	Developer and Management Tools	
22	The Cloud Console Tour	
23	The Google Cloud Platform Free Trial and Free Tier	
24	Welcome to Google Cloud Platform – The Essentials of GCP	
SOURCE: 02	Google Cloud Platform GCP	
01	Google Cloud Platform Part-1.1	
02	Google Cloud Platform Part-2.1	
03	Google Cloud Platform Part-3.1	
04	Google Cloud Platform Part-1.2	
05	Google Cloud Platform Part-2.2	
06	Google Cloud Platform Part-3.2	
07	Google Cloud Platform Part-1.3	
08	Google Cloud Platform Part-2.3	
09	Google Cloud Platform Part-3.3	
10	Google Cloud Platform Part-1.4	
11	Google Cloud Platform Part-2.4	
12	Google Cloud Platform Part-3.4	

	Virtualization
SOURCE: 01	Introduction to Virtualization
01	<u>Virtualization Introduction</u>
02	VMs Hosts and Hypervisors
03	Types of Hypervisors   Hypervisors
04	VM Files and Live Sate   Hypervisors VM
05	CPU Virtualization   Virtual Machine   Cloud
06	Memory Virtualization   Virtual Machine
07	Virtual Networking   Network Virtualization
08	Storage Virtualization   Vm ESXI   Virtual Machine
09	Virtualization Benefit Efficiency   Virtualization
10	Virtualization Benefit Mobility   VMWARE   Virtualization
11	Converting Physical Servers to VMs   Covert Physical Server to VMs   Virtual Machine
SOURCE: 02	Introduction to Virtualization
01	Overview of Virtualization
02	VMware VSphere A-Z – Getting Started with Virtualization
03	Licensing Overview of VMware VSphere
04	VMware VSphere Overview
05	Architecture of Server Virtualization
06	Describe The Software Defined Datacenter (SDDC)
07	Introduction to VMware ESXi (Hypervisor)
08	Installing and Configuring VMware ESXi
09	Introduction to VMware VCenter Server
10	Installing VMware VCenter Server
11	Using VSphere Client to Access VCenter Server
12	Understanding of VCHA (VCenter High Availability)
13	Overview of Virtual Standard Switch
14	Creating and Configuring Virtual Standard Stitches
15	Network Policies – Security , Traffic Shaping, NIC Teaming and Failover
16	Overview of Storage Concept
17	Understanding of Different Types of Data-stores
18	Thin vs Thick Disk Type
19	Create and Manage VMFS Data Store
20	<u>Understanding of Virtual Machine and Files</u>
21	<u>Creating Virtual Machine</u>
22	<u>Understanding of VMware Tools and Virtual Hardware</u>
23	Day to Day Operations Related to Virtual Machine
24	Creating Resource Pools and VApp
25	Understanding of VSphere High Availability (HA)
26	Configuring VSphere HA
27	Migrating Virtual Machines Using VMotion
28	Migrating Virtual Machines Using Storage VMotion
29	<u>Understanding of VSphere Fault Tolerance</u>
30	<u>Understanding of VSphere Distributed Resource</u>
31	Configuring VSphere DRS
32	<u>Understanding of VSphere Update Manager</u>
33	<u>Understanding of SSphere Replication</u>
34	<u>Understanding of VSphere Data Protection</u>