QP Code : 15257

(3 Hours)   [Total Marks : 80

N.B. : 1) Question 1 is compulsory.
      2) Attempt any three from remaining Questions.
      3) Assume suitable data wherever necessary.
      4) Figure indicates marks.

1 (a) Explain MVC Architectural pattern and give an example of an application   10
where it is used.

(b) Define Architectural Model, View and Viewpoint, Explain different types   5
of inconsistencies in multiple view architectural description

(c) What is Architectural trade off analysis method ?   5

2 (a) Explain Domain & Style specific ADLs?   10

(b) Design Communication Patterns?   10

3 (a) Explain domain specific architecture for Wireless Network?   10

(b) Design issues for NFPs:-Complexity ,Heterogeneity   10

4 (a) Define architectural patterns,reference models and reference architectures   6
and bring out the relationship between them?

4 (b) What are various process recommendations as used by an architect while   4
developing S/Architectures?

4 (c) Explain Service oriented Architecture?   10

5 (a) What are access control patterns?   6

(b) Explain software architecture in context of overall software lifecycle?   6

(c) What are different procedure calls and linkage connectors?   8

6 (a) What is the difference between internal and external consistency? Explain   10
name inconsistency?

(b) Explain applied Architectural with respect to Decentralized   10
Architecture(Grid)

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BB-Con. 9478-16.

(Time: 3 hrs)   (Total Marks 80)

1. Question no 1 is compulsory, solve any 3 questions from remaining 5 questions.
2. Assume Suitable data whenever necessary.
3. Figures in the right indicate full marks.

Q1. (a) What are the different ways in which one can respond to a risk?   05
Q1 (b) Discuss the different levels of vulnerability assessment?   05
Q1 (c) Explain Quantitative risk assessment process.   05
Q1. (d) What are some of the best practices of conducting a risk assessment?   05

Q2. (a) What are some of the Internet Host and Network enumeration techniques? Discuss with examples.   10

Q2 .(b) What is a vulnerability? Assume that you are appointed as an IT security officer and have to do a vulnerability assessment of an organization having different servers with both Windows 7 platform and Linux OS. List some of the common vulnerabilities of these operating systems and mention the steps you would propose to handle them.   10

Q3 (a) Discuss attacker types and their characteristics for an IT infrastructure.   10

Q3 (b) Discuss some tools used to perform IP network scanning. Write in detail about TCP port scanning methods.   10

Q4. (a) What is the role of system criticality matrix and information criticality matrix in scoping a project? Build information criticality matrix for an organization which wants to create an online store for selling home accessories and apparels.   10

Q4. (b) How can one assess remote information sevices? What are some of the countermeasures to be considered for hardening remote information services?   10

Q5. (a) Explain the procedure to prepare final report and post assessment activities of enterprise security and risk assessment of any system.   10

Q5. (b) What is Elliptic curve cryptography? 3. Explain how Elliptic curve cryptography is used along with Diffie Hellman key exchange algorithm.   10

Q6.   Write short notes on: (any two)
    i)   Web application attacks   20
    ii)   Fingerprinting accessible web servers
    iii)   Laws and mandates for risk assessment

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(Time: 3 Hrs) **Marks: 80**

N.B. : 1. Question no. 1 is **compulsory**.
     2. Solve any **Three** questions out of remaining **Five** questions.

Qu-1	a)	Differentiate between BNN and ANN	5
	b)	Explain McCulloch–Pitts Neuron Model in brief.	5
	c)	What are the various types of Mutation techniques?	5
	d)	Define Fuzzy Set. How it is different from Crisp Set?	5
Qu-2	a)	Explain the significance of hidden layer. How it is useful in character recognition?	10
	b)	Discuss properties of fuzzy set in detail with suitable example.	10
Qu-3	a)	Explain in detail the Genetic Algorithm based backpropagation network.	10
	b)	Implement OR function using perceptron networks for bipolar inputs and targets.	10
Qu-4	a)	What is Defuzzification? Explain any two Defuzzification methods.	10
	b)	Explain architecture and training algorithm for ART network.	10
Qu-5	a)	Explain Bidirectional Associative Memory in detail.	10
	b)	Explain the architecture of ANFIS with the help of a diagram	10
Qu-6	a)	Write short note on Applications of Neural Network.	5
	b)	Write short note on Hybrid system.	5
	c)	Explain Iterative clustering in detail.	5
	d)	Explain in short different parameters of backpropagation algorithm which affect the performance.	5

Q.P. Code : **15281** MAY-16

(3 Hours)   **[Total Marks : 80**

NB :

1. Question 1 is compulsory
2. Attempt any 3 questions out of the remaining questions.
3. Assume suitable data whenever required

Q1.
a) List and briefly explain various services of NGN   (5)
b) Compare various IEEE 802.11x standards. (a, b and g)   (5)
c) Explain the architecture of Wireless Mesh Network   (5)
d) Explain Transmission hierarchy of media.   (5)

Q2.
a) Explain what is Evolution Data Optimized (EVDO)   (10)
   and Ultra Mobile Broadband (UMB). Explain its uses
b) Explain the function of Resource and Admission Control function.   (10)
   How does RACF interfaces with NACF

Q3.
a) Draw and give details how an IMS session is established   (10)
b) Explain OSS transition strategies and justify the importance of standards (10)

Q4.
a) Justify the need of MANET protocols. Explain the advantages and   (10)
   disadvantages of proactive protocols over reactive protocols.
b) Explain Zachman framework and its mapping with e-TOM.   (10)
   Explain with the help of an example.

Q5.
a) Compare Bluetooth and Zigbee technologies. What are the components & (10)
   applications of Zigbee, explain in detail.
b) Explain LTE in detail, how it is effective in reducing power and space   (10)
   requirements.

Q6.   **Explain any 2**   (20)
a) Compare MIP6 and IP6
b) PSTN/ ISDN Emulation Component
c) Management Function (FCAPS)

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BB-Con. 11162-16.

Q.P. Code : 681001

(3 Hours)   [Total Marks : 80

N.B. : (1) Question **No.1** is **compulsory**, solve **any 3** questions from remaining
             5 questions.
      (2) Assume suitable **data** whenever **necessary**.
      (3) **Figures** in the **right** indicate **full marks**.

1. (a) Describe the Cloud Service Delivery models with Examples.   10
   (b) Explain Identity Management and Access control.   10

2. (a) List the risks and issues of cloud computing mentioned by Gartner. 10
   (b) Explain when to avoid Public Cloud and Private Cloud.   10

3. (a) Compare and Contrast between Google App Engine and Amazon EC2.   10
   (b) Describe the Open Stack Havana Architecture.   10

4. (a) Explain the architecture of MCC.   10
   (b) Write down about load balancing.   10

5. (a) Explain about virtualization of CPU ,memory and I/O devices.   10
   (b) Draw out the comparison between KVM and Xen hypervisor   10

6. Write short notes on (**any Four**) :   20
       (a) Implementation levels of Virtualization
       (b) Trusted Cloud Computing
       (c) SSO (Single Sign On)
       (d) Component of Eucalyptus

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Con. 10060-16.