MEJJAFT/Sem TC (BSG) Adv. Spo Azchitechure

QP Code : 2789

(3 Hours)

[Total Marks : 80

4

	N.E	3. (1)) Question no. 1 is compulsory.	10
		(2	2) Attempt any three questions from remaining	\sim
		(3)	Assume data if required	\mathcal{O}
	1.	(a)	Develop two alternative architectures for a sample application "Online Attendance System" according to you how there are different? Which architecture will produce robust system and why?	10
	-	(b)	Define Architectural Model, View and Viewpoint. Explain different types of incon- sistency in multiple view architecture description?	10
	2.	(a)	How architectural style differ from architectural pattern. Explain with an example.	10
		(b)	Explain some design strategies to tackle novel problem in the context of soft- ware engineering.	10
	3.	(a)	Explain different variations of Procedure Call and linkage Connectors	10
		(b)	Define architectural modeling and architectural model. Design an architectural model to centrally control traffic signals in the city based on traffic density to reduce waiting time.	10
		(2)	What is the difference between internal and external consistency? Evaluin	10
	4.	(a)	Name inconsistency.	
		(b)	Explain Representational State Transfer Style- REST	10
	5.	(a)	Define Non Functional Property. How efficiency of the connector can be improved.	10
		(b)	Can multiple NFP's be achieved simultaneously? If yes how? if not why?	10
				10
	6.	(a)	Explain MVC. For which type of application MVC is suitable Interactive or Non	10
6		(1)	Eleborate on different Tuelter architecture Internet action according System	
		(b)	architecture is suitable for distributed or non distributed systems?	

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Con. 8802-15.

ME Sem - IL / INFT / CBSGIS/ May - 2 Exterprise security & Risk Management QP Code: 2793 (Time: 3 hrs) (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. O1. (a) What are the basic elements of risk from an IT infrastructure 10 perspective? What are the best practices of conducting a risk assessment? Q1. (b) What is a vulnerability? List the stages of vulnerability in settware. 10 Explain briefly some common vulnerabilities in Windows OS. Q2. (a) What is the role of policies in vulnerability assessment? Discuss 10 different types of security policies, their deployment and policy life cycle. Q2.(b) What are the common documentation problems while writing a good 10 Report? Briefly describe the contents of a good report. Q3 (a) What is the Quantitative Risk Assessment Approach? Suppose 10 Company XYZ has workstations valued at \$ 75,50,000. The asset value is derived from IT Systems, Resources, Applications and hardware. Find the potential threats to the asset. Determine appropriate exposure factor for the asset in relation to each threat. Calculate SLE, ARO, ALE. Q3(b) What is the importance of asset valuation in risk assessment? Discuss 10 different risk assessment approaches. Q4. (a) What is the rationale behind IP network scanning? List the tools used for 12 enumerating network details and explain any one tool in detail. Q4. (b) Explain how critical systems are reviewed using SCM and OICM. 08 Q5. (a) Explain some web-server threats with examples. What are the counter 10 measures which should be considered by administrators to tighten the security of web servers? Q5. (b) What are Elliptic curves? Explain Elliptic curve cryptography. 10 06.

Write short notes on: (any two)ii) Cross-site request forgeryii) HIPAA and GLBA20iii) Web-application testing toolsiv) SQL-injection attacks20

BE-Con. : 9533-15.

Q.P. Code : **2795**

CINFT

(3 Hours)

[Total Marks: 80

20

- **N.B.**: (1) Question No. 1 is compulsory.
 - (2) Attempt any three questions out of the remaining five questions.
 - (3) Figures to the right indicate full marks.

ME-SemIL (CBSGIS), Soft Computing

(4) Assume suitable data if necessary.

1. Answer the following :

- (a) Explain how ANN, Fuzzy Logic and GA can be combined for certain application?
- (b) Using sigmoid activation function with slope parameter 0.1 obtain the output at neuron-4 for the following network:



- (c) What is associative memory? Explain it types?
- (d) What is linear reparability? Why single layer perceptron is not capable of, solving linearly inseparable problems?
- 2. (a) Design Hebb net to implement logical AND function? Use bipolar inputs and 10 targets?
 - (b) Explain error back propagation training algorithm with the help of flowchart. 10
- 3. (a) Explain architecture of BAM. How storage and retrieval is performed in BAM? 10
 - (b) What is neural network architecture? Explain logistic sigmoid function with 10 example?
- 4. (a) Let A= {al, a2}; B = {bl, b2 b3} and C = {c1, c2}. Find max-min composition 10 of R and S and max-product composition of R and S defined below :

Let R be a relation from A to B defined by matrix :

Let S be a relation from B to C defined by matrix:

b	1 b2	b3		C	1 c2
a1(0.	4 0.5	0)	2	b1(0.	2 0.7
a2(0.:	2 0.8	0.2)		b2 0.	3 0.8
				b3(1.	0 0.0

BB-Con. 10482-15.

TURN OVER

Q.P. Code : **2795**

10

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- (b) How hybrid system is useful? Explain the concept of Neuro Fuzzy Hybrid 10 system?
- 5. (a) Using Mamdani fuzzy model, Design a fuzzy logic controller to determine the 10 wash time of domestic washing machine. Assume that the inputs are dirt and grease on cloths. Use three descriptors for each input variables and fire descriptors for output variables. Derive necessary membership function and required fuzzy rules for the applications.
 - (b) Explain architecture and training algorithm for ART network?
- 6. Answer the following:

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- (a) Competitive Learning
- (b) Binary Hopfield Network
- (c) Delta Learning Rule
- (d) Defuzzification

M.ELSEMI (CBSOUS) VITMOLization & cloud computing)

QP Code : 2801

(Time: 3 hrs)

(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.
- Q 1) (a) What is secure execution environment and communication in cloud? Explain different threats and Vulnerability specific to Virtual machines. (10 Marks)
 (b) Enlist and explain the principal design issues that are to be addressed a QOS-aware distribution (middleware) architecture for cloud. (10 Marks)
- Q 2) (a) What is Nimbus? What is the main way to deploy Nimbus Infrastructure? What is the difference between cloudinit.d and the Context Broker?
 (10 Marks)
 (b) Explain Xen Cloud Platform (XCP) with suitable block diagram.
- Q 3) (a) Explain the two fundamental functions, identity management and access control, which are required for secure cloud computing. (10 Marks)
 (b) Explain in briefly about the Inter cloud resources management. (10 Marks)
- Q 4) (a) What is the fundamental differences between the virtual machine as perceived by a traditional operating system processes and a system VM? (10 Marks)
 (b) How to discover cloud service development services and tools? Explain it briefly. (10 Marks)
- Q 5) (a)What is quality of service (QoS) monitoring in a cloud computing? [8] Enlist and explain different issues in inter-cloud environments. (10 Marks)
 (b) Explain the data security and virtual machine security in detail? (10 Marks)

(20 Marks)

Q 6) Explain in brief (Any four)
i) Open Stack
ii) Why is cloud called as ecosystem? Justify.
iii)Service offered by Amazon AWS.
iv) QEMU

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v) Storage Virtualization.

BB-Con. 11169-15.

ME/Sem II/IT/CBSGS/May 2015/Next Generation Network

QP Code : 2814

(3 Hours) [Total Marks : 80 **N. B.**: (1) Q. I is compulsory. (2) Answer any three out of remaining five questions (3) Assume suitable data whenever necessary 1. Answer any four-20 (a) How wireless charging of handheld devices works? (b) Explain LTE and OFDM. How LTE reduce latency (c) Compare CAPEX vs OPEX (d) Compare Wireless Ad-hoc Network with Wireless Sensor Network (e) Explain HSPA and HSPA+ features 10 (a) What is NGN. Draw and explain the Architecture of NGN. 2. (b) Comparison between 10 (i) ITU and TISPAN (ii) e-TOM and ITIL (a) Explain Zachman framework and how it map to e-TOM framework. Give 10 3. example scenario for eTOM. 10 (b) Explain in brief Anmp algorithms for clustering (a) Describe Wi-Max reference model or architecture with its protocol 10 4. structure in detail (b) What is Zigbee? What are the components and what network topologies 10 used in it. 10 (a) Explain the difference between 1Pv4 and 1Pv6 in NGN and its migration 5. to NGN. 10 (b) Explain how authentication, authorization and mobility supported in N GN. (a) Explain various Bluetooth usage models and the applications of 10 6. bluetooth. (b) What are the IMS based services in NGN? Explain them in detail. 10

BB-Con. : 12097-15.