AR 19

Reg. No

GIET UNIVERSITY, GUNUPUR – 765022
B. Tech (Seventh Semester – Regular) Examinations, November – 2022
BPECS7013 / BPECT7013 – Cloud Security
(CSE & CST)

Time: 3 hrs   Maximum: 70 Marks

Answer ALL Questions
The figures in the right hand margin indicate marks.

PART – A: (Multiple Choice Questions)   (1 x 10 =10 Marks)

Q.1. Answer *ALL* questions   [CO#]   [PO#]

a. Which of the following service provider provides the least amount of built in security?   4   1

   (i)   SaaS   (ii)   Paas

   (iii)   Iaas   (iv)   All of the mentioned

b. Point out the correct statement.   1   2

   (i)   Different types of cloud computing service models provide different levels of security services   (ii)   Adapting your on-premises systems to a cloud model requires that you determine what security mechanisms are required and mapping those to controls that exist in your chosen cloud service provider

   (iii)   Data should be transferred and stored in an encrypted format for security purpose   (iv)   All of the mentioned

c. Which of the following services those need to be negotiated in Service Level Agreements?   2   3

   (i)   Logging   (ii)   Auditing

   (iii)   Regulatory compliance   (iv)   All of the mentioned

d. Which of the following is not the feature of Network management systems?   3   1

   (i)   Accounting   (ii)   Security

   (iii)   Performance   (iv)   None of the mentioned

e. Which of the following type of virtualization is also characteristic of cloud computing?   2   3

   (i)   Storage   (ii)   Application

   (iii)   CPU   (iv)   All of the mentioned

f. Which of the following are the features of cloud computing?   1   2

   (i)   Security   (ii)   Availability

   (iii)   Large Network Access   (iv)   All of the mentioned

g. Which of the following is the most essential element in cloud computing by CSA?   4   1

   (i)   Virtualization   (ii)   Multi-tenancy

   (iii)   Identity and access management   (iv)   All of the mentioned

h. Which of the following is an example of a SaaS cloud service?   3   2

   (i)   Google Workspace   (ii)   Dropbox

   (iii)   Salesforce   (iv)   All of the mentioned

i. In which environment do admins have the most control over cloud app security?   2   1

   (i)   SaaS   (ii)   Paas

   (iii)   Iaas   (iv)   SECaaS

j. During which phase of a cloud migration framework is security the most critical?   3   1

   (i)   Discovery Phase   (ii)   Cloud Migration Phase

   (iii)   Operation Phase   (iv)   All of the mentioned

PART – B: (Short Answer Questions)   **(2 x 10 = 20 Marks)**

Q.2. Answer *ALL* questions

		[CO#]	[PO#]
a.	Distinguish between authentication and authorization?	2	2
b.	Describe cloud computing services.	1	1
c.	Discuss the objective of cloud information security	2	2
d.	What are the most important advantages of cloud technologies for social networking application?	2	3
e.	Define cloud computing and identify its core features?	1	1
f.	What are the advantages and disadvantages of virtualization?	3	2
g.	What are the different cloud security challenges	4	3
h.	Explain digital signature?	1	2
i.	Explain Jurisdictional issues raised by Data location?	3	1
j.	Explain application level security in details?	4	2

PART – C: (Long Answer Questions)   **(10 x 4 = 40 Marks)**

Answer *ALL* questions

		Marks	[CO#]	[PO#]
3. a.	Explain the five basic security principles?	5	1	2
b.	Explain different levels of infrastructure security?	5	1	3
	(OR)			
c.	How do you implement network level security?	5	1	2
d.	Explain three areas of security required at the application level?	5	1	3
4. a.	Discuss the cloud computing reference model.	5	2	3
b.	Describe the basic component of an IaaS-based solution for cloud computing?	5	2	1
	(OR)			
c.	Provide some examples of IaaS implementation.	5	2	2
d.	What does the acronym SaaS mean? How does it relate to cloud computing?	5	2	3
5. a.	What is Key Management? How does Key Management work?	5	3	1
b.	Explain Strengths and Weaknesses of Public-key Cryptography?	5	3	3
	(OR)			
c.	What is meant by digital signature? Explain in details?	5	3	1
d.	How does a block cipher work?	5	3	3
6. a.	What is virtualization? What are its benefits?	5	4	3
b.	List and discuss various types of virtualization?	5	4	2
	(OR)			
c.	What is virtualized security? What are the benefits of virtualized security?	5	4	2
d.	What is biggest threat to security on cloud?	5	4	3

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