	P.E.S. COLLEGE OF ENGINEERING **(AN AUTONOMOUS INSTITUTE)** **CHH. SAMBHAJINAGAR-431002** **Regular Winter Examination – 2025** **Course: F.Y.M. Tech. Branch: CSE (Cyber Security) Semester: I** **Subject Code & Name: MTPESCS104T Cloud Security** **Max Marks: 60 Date: Duration: 3 Hr.**		
	Instructions to the Students: *1. All the questions are compulsory.* *2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.* *3. Use of non-programmable scientific calculators is allowed.* *4. Assume suitable data wherever necessary and mention it clearly.*		
		(Level/CO)	Marks
Q. 1	**Solve Any one of the following.**		
A)	**Expected Answer** **Marks** Definition of Shared Responsibility Model 2 Definition of Shared Responsibility Model 4 Customer Responsibilities 4 Service Model Comparison (IaaS, PaaS, SaaS) 2 **Total** **12 Marks**	BL2/CO1	**12**
B)	**Expected** Overview of deployment models- Basic explanation **1** Public Cloud -Characteristics, advantages, limitations **3** Private Cloud -Characteristics, advantages, limitations **3** Hybrid Cloud -Characteristics, advantages, limitations **3** Suitable model + justification -Clear and valid reasoning **2** **Total 12 Marks**	BL2/CO1	**12**
Q.2	**Solve Any one of the following.**		
A)	**Expected** **Marks** Introduction to object storage access control- Context and overview **2** Identity-based policies -Definition, characteristics, examples, use case **5**	BL3/CO2	**12**

	Resource-based policies -Definition, characteristics, examples, use case **5** **Total 12 Marks**		
B)	**Expected Answer** Definition of Homomorphic Encryption Clear explanation of concept- 3 Security benefits Any five relevant benefits explained- 5 Main technical challenge Performance / computational overhead- 3 Additional challenges / clarity Practical limitations- 1 **Total 12 Marks**	BL3/CO2	**12**
Q. 3	**Solve Any one of the following.**		
A)	**Expected** IAM overview and components Clear introduction- **2** IAM Users Explanation and limitations- **3** IAM Groups Explanation and limitations- **3** IAM Roles Explanation and advantages- **3** Most flexible component + justification Correct identification- **1** **Total 12 Marks**	BL4/CO3	**12**
B)	**Expected** SAML explanation Definition, features, use cases **6** OAuth explanation Definition, features, use cases **6** **Total 12 Marks**	BL4/CO3	**12**
Q.4	**Solve Any one of the following.**		
A)	Definition of cloud risk assessment 3 Steps of risk assessment 7 Risk treatment / mitigation 2 **Total 12 Marks**	BL4/CO4	**12**
B)	**Section** **Description** **Marks** Introduction to cloud logging Clear context **2** Cloud logging mechanisms Explanation of different log types **5** Logs in monitoring Detection and alerting role **2** Logs in forensic investigation Evidence and investigation role **2** Logs in regulatory compliance Compliance and audit role **3** **Total** **12 Marks**	BL4/CO4	**12**
Q. 5	**Solve Any one of the following.**		

A)	**Section** Introduction Definition and relevance **2** Incident response stages Clear explanation with examples **8** Importance of incident response Business and compliance impact **2** **Total 12 Marks**	BL3/CO5	**12**
B)	**Section** Introduction to container security Definition and context **2** Container security practices General cloud container security concepts **3** Docker security challenges Any four challenges explained **4** Kubernetes security challenges Any three challenges explained **3** **Total 12 Marks**	BL3/CO5	**12**
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