Subject Code:- ACSBS0614

Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU, Lucknow)

B.Tech

SEM: VI - THEORY EXAMINATION (2023 - 2024)

Subject: Enterprise Systems

Time: 3 Hours

Printed Page:- 04

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*

1. This Question paper comprises of **three Sections -A**, **B**, **& C**. It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.

2. Maximum marks for each question are indicated on right -hand side of each question.

3. *Illustrate your answers with neat sketches wherever necessary.*

4. Assume suitable data if necessary.

5. *Preferably, write the answers in sequential order.*

6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

1. Attempt all parts:-

- 1-a. Name the language that is commonly used to query relational databases. (CO1) 1
 - (a) SQL (b) XML

(c) HTML

(d) CSS

- 1-b. framework is known for its convention over configuration approach in 1 implementing the MVC architecture. (CO1)
 - (a) Ruby on Rails
 - (b) Django
 - (c) Spring
 - (d) Laravel

1-c. The difference between SOAP and RESTful web services is..... (CO2)

- (a) SOAP uses XML for data exchange, while RESTful uses JSON.
- (b) SOAP is stateless, while RESTful is stateful.

SECTION A

20

Max. Marks: 100

1

(c) SOAP is protocol-independent, while RESTful is HTTP-based.

1

- (d) SOAP is synchronous, while RESTful is asynchronous.
- 1-d. Give an example of a domain-specific ERP module for healthcare. (CO2)
 - (a) Patient Management
 - (b) Finance
 - (c) Human Resources
 - (d) Materials Management
- 1-e. The process of inviting bids from potential suppliers to fulfill a business 1 requirement is....... (CO3)
 - (a) Quoting
 - (b) Procurement
 - (c) Tendering
 - (d) Sourcing
- - (a) Tailored to specific business requirements
 - (b) Lower initial cost
 - (c) Higher customization options
 - (d) Longer development time
- 1-g. Select the technology that provides a way to ensure the integrity and 1 authenticity of digital documents or messages. (CO4)
 - (a) Digital certificates
 - (b) Digital signatures
 - (c) Public key infrastructure
 - (d) Secure sockets layer (SSL)
- 1-h. Give the name of security mechanism that verifies whether a user has the 1 necessary permissions to access a resource...... (CO4)
 - (a) Authentication
 - (b) Authorization
 - (c) Validation
 - (d) Encryption
- 1-i. disaster recovery site requires minimal hardware and can be operational 1 quickly. (CO5)

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	(a) Cold Site	
	(b) Warm Site	
	(c) Hot Site	
	(d) Mobile Site	
1-j.	The function of a network switch is (CO5)	1
	(a) Filters and forwards data packets	
	(b) Connects different networks	
	(c) Provides wireless access	
	(d) Converts analog signals to digital signals	
2. Attempt all parts:-		
2.a.	Briefly explain the role of a primary key in a database table. (CO1)	2
2.b.	Define Interoperability in the context of SOA. (CO2)	2
2.c.	Define Customer Relationship Management (CRM) and Supplier Relationship	2
	Management (SRM). (CO3)	
2.d.	Describe encryption and its role in security. (CO4)	2
2.e.	Define RAID. (CO5)	2
	SECTION B	30
3. Answer any <u>five</u> of the following:-		
3-a.	Explain the role of middleware in a three-tier environment in detail.(CO1)	6
3-b.	Discuss the purpose of Java Server Pages (JSP) in web development in detail with suitable example. (CO1)	6
З-с.	Describe the architecture of an ERP system. (CO2)	6
3-d.	Differentiate between SAP and Oracle ERP systems.(CO2)	6
3.e.	Compare and contrast the features and benefits of Customer Relationship Management (CRM) and Supplier Relationship Management (SRM) systems in optimizing business relationships. (CO3)	6
3.f.	Describe the key differences between authentication and authorization in the realm of security.(CO4)	6
3.g.	Describe the concept of load balancing in detail. (CO5)	6
	SECTION C	50
4. Answer any <u>one</u> of the following:-		

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4-a. Describe the components of a Database Management System (DBMS) and their 10 respective roles in managing data. (CO1)

4-b. Compare and contrast SQL and NoSQL databases, including their strengths and 10 weaknesses.(CO1)

5. Answer any one of the following:-

- 5-a. Discuss about techniques used to achieve loose coupling between software 10 components. (CO2)
- 5-b. Explain the core principles of SOA and how they differ from traditional 10 monolithic architectures. (CO2)

6. Answer any one of the following:-

- 6-a. Explain the primary functions of a Customer Relationship Management (CRM) 10 system and how they benefit businesses. (CO3)
- 6-b. Explain the main steps involved in the software acquisition process, and why is 10 each step important? (CO3)

7. Answer any <u>one</u> of the following:-

- 7-a. Explain the role of access control in safeguarding sensitive information and 10 resources within an organization. (CO4)
- 7-b. Provide an overview of firewall, and how does it enhance network 10 security? (CO4)

8. Answer any one of the following:-

- 8-a. Discuss the main considerations when designing and implementing a backup 10 strategy for enterprise data. (CO5)
- 8-b. Describe the architecture of a Storage Area Network (SAN) and how it differs 10 from Network Attached Storage (NAS). (CO5)