Roll No. [   ]

ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)

B.E. (Full Time – Minors) - END SEMESTER EXAMINATIONS, NOV / DEC 2024

Industrial Engineering

IE5072 – Enterprise Resource Planning
(Regulation 2019)

Max. Marks: 100

Time: 3hrs

CO1	Understand the basics of ERP and appreciate the issues to be considered in the design of ERP
CO2	Obtain sufficient knowledge to about the business modules of ERP .
CO3	Assess the issues in ERP implementation and appraise the roles of different stakeholders in the implementation process.
CO4	Examine the post ERP implementation issues.
CO5	Perceive knowledge on future trends in ERP systems

BL – Bloom's Taxonomy Levels
(L1-Remembering, L2-Understanding, L3-Applying, L4-Analysing, L5-Evaluating, L6-Creating)

PART- A(10x2=20Marks)
(Answer all Questions)

Q.No.	Questions	Marks	CO	BL
1	What is meant by business process reengineering?	2	CO1	1
2	Write the function of integrated Information system?	2	CO1	1
3	Brief account on Online Analytical Processing (OLAP).	2	CO2	2
4	Write the risks of ERP.	2	CO2	1
5	What are the different phases of ERP implementation?	2	CO3	2
6	How BPR is connected with ERP. Explain.	2	CO3	2
7	What do you mean by Value analysis?	2	CO4	1
8	How to reduce ERP maintenance cost?	2	CO4	2
9	Write short notes on Supply chain management.	2	CO5	1
10	What are the benefits of cloud computing?	2	CO5	2

PART- B(5x 13=65Marks)
(Restrict to a maximum of 2 subdivisions)

Q.No.	Questions	Marks	CO	BL
11 (a)	Explain the fundamental technologies of ERP, and analyze their significance in ensuring seamless integration across business functions.	13	CO1	4
	OR			
11 (b)	Identify and explain the planning, design, and implementation issues in ERP systems. Apply these insights to recommend how a company could address such challenges effectively during an ERP project.	13	CO1	3
12 (a)	Describe the various functional modules in ERP systems. Analyze how these modules contribute to improving overall organizational efficiency.	13	CO2	4
	OR			
12 (b)	Write in detail about the different phases of ERP implementation and discuss how a company can ensure smooth transitions	13	CO2	4

		between these phases with minimal disruptions.			
13 (a)		Explain the phases and life cycle of ERP implementation. Develop a practical approach to identify potential risks at each stage and propose mitigation strategies.	13	CO3	4
		OR			
13 (b)		Detail the steps involved in selecting an ERP system, and apply these steps to evaluate the suitability of a cloud-based ERP solution for a medium-sized manufacturing company.	13	CO3	3
14 (a)		Discuss the top 10 success factors for ERP implementation and analyze how these factors interact to influence project outcomes in real-world scenarios.	13	CO4	4
		OR			
14 (b)		Evaluate how a company can ensure its ERP investment leads to increased profitability by aligning system capabilities with strategic objectives. Provide examples to support your answer.	13	CO4	4
15 (a)		Explain the process of business analytics in ERP systems. Apply this understanding to propose a strategy for using business analytics to improve decision-making in a retail organization.	13	CO5	4
		OR			
15 (b)		Describe the main functions of supply chain management and customer relationship management in ERP systems. Analyze how the integration of these modules enhances organizational agility and customer satisfaction.	13	CO5	3

PART- C(1x 15=15Marks)
(Q.No.16 is compulsory)

Q.No.	Questions	Marks	CO	BL
16.	Hershey's, a renowned confectionery company, attempted a large-scale ERP implementation in 1999 to modernize its supply chain, inventory management, and order processing systems. The project involved integrating SAP's ERP software, Siebel's CRM software, and Manugistics' SCM software. However, the implementation was fraught with challenges and ultimately led to significant operational disruptions. The key issues identified were: 1. Tight Deadlines: Go live during its busiest season (Halloween). 2. Scope Mismanagement: Multiple complex systems 3. Insufficient Training: Employees were not adequately trained 4. Data Migration Issues: Critical data inconsistencies 5. Impact: The company experienced delays in processing orders, inventory shortages, and a significant drop in revenues, amounting to millions of dollars in losses. 1. **Analyze** the critical factors that contributed to the failure of Hershey's ERP implementation. How did poor planning and execution exacerbate the challenges? (6 Marks) 2. **Propose** a revised implementation strategy for Hershey's, focusing on project timeline, scope management, training, and stakeholder engagement. (6 Marks) 3. **Examine** the lessons that other organizations can learn from Hershey's ERP failure and provide recommendations to ensure ERP project success in similar industries. (4 Marks)	15	CO5	L6