SVKM's NMIMS
MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING / SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING

Academic Year: 2021-22

Programme: B.Tech (Computer) Year: III Semester: VI

Subject: Advanced Database Management System

Date: 13 April 2022

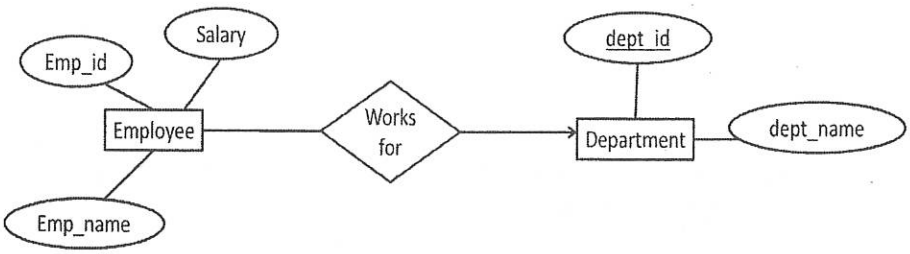
Marks: 100
Time: 10.00 am to 1.00 pm
Durations: 3 (hrs)
No. of Pages: 02

Final Examination

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover of the Answer Book, which is provided for their use.

1) Question No. _1___ is compulsory.
2) Out of remaining questions, attempt any __4___ questions.
3) **In all ___5_ questions to be attempted.**
4) All questions carry equal marks.
5) **Answer to each new question to be started on a fresh page.**
6) **Figures in brackets on the right hand side indicate full marks.**
7) **Assume Suitable data if necessary.**

Q1		**Answer The following questions**	20
CO-1 ; SO- 1; BL-2	a.	Compare SQL and PL/SQL	
CO-1 ; SO-1 ; BL-1	b.	Explain shared subclass with example	
CO-2 ; SO-7 ; BL-1	c.	Describe extent in OODB	
CO-3 ; SO-7 ; BL-4	d.	Categorize the different techniques to perform horizontal fragmentation in parallel databases?	
CO-4; SO- 1; BL-6	e	Write Responsibilities of DBA	
Q2 CO-1; SO-2; BL-6	a	An insurance company has different policies. Policies have pno,term_price and coverage.Policies are categorized based on their types.There are two types:Auto_policy and Home_policy.Policies for vehicles come under Auto policy.Auto_policy has pno,vehicle type and issue date.Policies for house come under home policy.Home_policy has pno,issue date and term_price.Customers take policies policy through policy agent.A customer can take only one policy . Design an extended ER diagram for the above system and convert it into relational schema.	10
CO-2 ; SO-7 ; BL-4	b	Device the steps for converting relational database into OODB	10
Q3 CO-1; SO-2; BL-6	a	Write a PL/SQL block to increment salary of all employees above age 25 in company by 5000 and print number of rows updated by above DML operation.	10
CO-3 ; SO-7 ; BL-1	b	Describe an active database in details.	10

Q4 CO-2; SO-1; BL-4	a	Explain Nested Relation in ORDBMS and illustrate with example.	10
CO-3 ; SO- 1; BL-4	b	How concurrency control is achieved in Distributed databases	10
Q5 CO-4; SO-1; BL-2	a	Explain various types of privileges	10
CO-3; SO-2; BL-5	b	 For above ERD give XML representation and XML DTD	10
Q6 CO-3,3,1,4; SO-7; BL-6		**Write a short note on** a) Temporal databases b) Geographical Information System c) Trigger d) Undo segment and its purpose	20