MKSSS's

Cummins College of Engineering for Women, Pune
(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

A.Y. 2021-22 Semester II

Third Year B.Tech - E&TC

In Semester Examination (T2), April - 2022

Course Code: PEEC3201E **Course Name: Database Management System**

Time: 01:00 Hour

Maximum Marks: 25

Instructions to candidates:
1. All questions are compulsory.
2. Use of scientific calculator is allowed.
3. Draw diagrams wherever necessary.
4. Assume suitable data wherever necessary.

Q.1 Outline the concept of Outer Join in DBMS.
For the given relations, find the left natural outer join scenario. **(05)**
Relation *course*

course_id	title	dept_name	credits
BIO-301	Genetics	Biology	4
CS-190	Game Design	Comp Science	4
CS-135	Robotics	Comp Science	3

Relation *prereq*

course_id	prereq_id
BIO-301	BIO-101
CS-190	CS-101
CS-347	CS-101

Q.2 Elaborate the significance of **Views** in DBMS? [3M] **(05)**
From the relations given below,
  (i) Create a view faculty from instructors; without their salary [1M]
  (ii) Find all such instructors in the ECE department [1M]

ID	name	dept_name	salary
1000	Srinivasan	ECE	65000
2000	Mozart	Finance	50000
1010	Gold	ECE	70000
3000	Kim	Comp Science	65000
3020	White	Comp Science	70000

Instructors

Q.3 Discuss Large-Object types and its usage with appropriate examples. **(05)**
Relate the concept of locators in this discussion.

Q.4 Illustrate the following with appropriate E-R diagram symbols: **(05)**
i) Entity Set.
ii) Primary Key
iii) Relationship Set.
iv) Disjoint generalization
v) Total participation of entity set in relationship.

Q.5 Structured Query Language is normally accessed from a programming **(05)**
language. Justify this statement with appropriate reasoning.
With suitable diagrams discuss the Application Program Interface and
embedded SQL mechanisms.