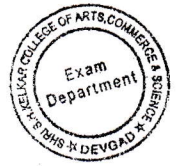**SHRI S.H.KELKAR COLLEGE OF ARTS, COMMERCE AND SCIENCE, DEVGAD (SINDHUDURG)**
SEMESTER I, Nov 2022
SUBJECT: DATABASE MANAGEMENT SYSTEMS   CLASS: FYIT
DATE: 16-11-2022
TIME: 8.15 a.m to 10:45 a.m.
DURATION: 2 - 1/2Hrs.
SUBJECT CODE: USIT106
MAX.MARKS: 75

Q1. Attempt any three of the following: **(15 Marks)**

1. What is Database Management System.
2. Explain building blocks of E-R model. State and explain types of attribute of E-R model.
3. What is Data Abstraction? Explain different views of data.
4. Explain in brief a. Use Case Diagram b. Specialization c. Class Diagram d. Weak Entity e. Null Values
5. Difference between File Processing and DBMS.

Q2. Attempt any three of the following: **(15 Marks)**

1. Explain importance of Transaction Management.
2. Draw an ER Diagram a. Car Insurance Company
   b. Railway Reservation.
3. Justify with illustrative example : BCNF is strong form of Normalization.
4. Explain various advantages of SQL.
5. Consider the following relation for database(Write Queries for following)

      Customer : { cust_no, c_name, c_addr, credit_amt }
      Orders : { order_no, o_date, order_status, cust_no }
    a. Find the names of the customers along with address.
    b. Find the customers who have been given more than Rs. 6000 credit.
  c. Find the names of the customers and order status.
    d. Find the orders placed by cust_no "C0005".
    e. Find the orders placed on 25th Feb 2017.

Q3. Attempt any three of following: **(15 Marks)**

1. Explain different type of operators in database.
2. How does View differ from a Table? Explain all commands of View?

3. Explain Relational Algebra.

4. Explain the Update command in SQL and drop command in SQL ?

5. Consider the following relation for database (Write Queries for following)

     Student: { s_roll, s_name, s_addr, course_code,fees_paid }

     Course : { c_code, c_name, HOD, total_fees}

     a. Find the names of the courses along with HOD.

     b. Find the names of the students who have enrolled for BMM course.

c. Find the HOD of MCA.

d. Find the students who stay in Pune and paid fees more than 5000.

     e. Find all students who have paid fees less than 3000.

Q4. Attempt any three of following: (15 Marks)

1. create a following table and perform following operations

I. Table student with ID name marks age course

II. Display student record having greater than 45 marks

III display student record having less than 35 marks

Iv. Display students with course name

V. Display student having age greater than 18

2. Write a short note on data type in database

3. Explain Relational model

4. Explain hierarchical model

5. Explain network model

Q5. Attempt any three of following: (15 Marks)

1: Explain database architecture

2. Explain various integrated use of database

3. Write a five function in my SQL mean Max average etc

4. Draw ERD for hospital management system

5. Write about Join Queries in Brief.