Duration 3:00 Hrs. Max marks: 60

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using following schema. Apply given Integrity Constraints and answer the following queries using SQL.(Fill up database with at least 10 records in each table).

SUPPLIER (<u>Sno</u>, Sname, address, City)

PARTS (Pno, Pname, Color, Weight, price) PROJECT (Jno, Mame, City)

SPJ (in=q,En, JUO, Qty)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- Legal cities are London, Paris, Rome, New York and Amsterdam.
- Supplier Number must start with 'S' followed by a decimal integer in the range of 0 to 9999.

#### **Queries:**

- a) Find all the projects which are provided 3 or more parts.
- b) Write a trigger on PROJECT table for update / insert such that the .jname value Should not be repeated.
- c) Find full details of all projects in London.
- d) Write a procedure for calculating the total sales of all the parts which are provided to projects in paris city.

Duration 3:00 Hrs. Max marks: 60

#### **Instructions:**

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- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using

following schema. Apply given Integrity Constraints and answer the following queries using SQL.(Fill up database with at least 10 records in each table).

PRODUCT (Maker, Modelno, Type)
PC (Modelno, Speed, RAM, HD, CD, Price)
LAPTOP (Modelno, Speed, RAM, HD, Price)
PRINTER (Mg delaQ, Color, Type, Price)

# **Details regarding Schemas**

- PC relation contains model no. of PC, its speed in MHz, RAM in MB, HD size in GB, Speed of CD reader, and price.
- The value for Maker in Product table can be IBM, Compaq,etc.
- PRINTER relation contains model no., value of Color should be T(if printer is color) or F (if printer is black 8r. white), type(laser, ink-jet, dot- matrix or dry), and price.

## **Integrity Constraints:**

- The values of any attributes should not be null.
- Product Type should one of these (PC, Laptop or Printer)

#### **Queries:**

- a) Find PC models having a speed of at least 150 MHz.
- b) Find those manufacturers that sell Laptops, but not PC's.
- c) Write a trigger on LAPTOP table such that the price should not less than 30000
- a) Write a procedure to find the manufacturer who has produced the most expensive laptop.

# **CA-LAB IV (NEW): Lab on DBMS**

Duration 3:00 Hrs. Max marks: 60

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - I) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create

database using following schema. Apply given Integrity Constraints and answer the following queries using SQL.(Fill up database with at least 10 records in each table).

PRODUCT (Maker, Modelno, Type)

PC (Modelno, Speed, RAM, HD, CD, Price)

LAPTOP (Modelno, Speed, RAM, HD, Price)

PRINTER ( Modelno, Color, Type, Price )

# **Details regarding Schemas**

- PC relation contains model no. of PC, its speed in MHz, RAM in MB, HD size in GB, Speed of CD reader, and price.
- The value for Maker in Product table can be IBM, Compaq,etc.
- PRINTER relation contains model no., value of Color should be T(if printer is color) or F (if printer is black & white), type(laser, ink-jet, dot- matrix or dry), and price.

# **Integrity Constraints:**

- The values of any attributes should not be null.
- Product Type should one of these (PC, Laptop or Printer)

## **Queries:**

- a) Find the different types of printers produced by Epson.
- b) Find those hard disk sizes which occur in two or more PC's.
- c) Write a trigger on LAPTOP table such that the minimum speed should be 1201\4Hz.
- d) Demonstrate the use of cursor using PRODUCT table.

Duration 3:00 Hrs. Max marks : 60

#### **Instructions:**

- Read the slip carefully.
- '• Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using

following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

## DOCTOR (Did, Dname, Daddress, qualification)

1AT1ENTMASTER (Pcode, Pname, Padd, age, gender, bloodgroup, <u>Pid)</u> ADMITTEDPATIENT (P code, Entry date, Discharge date, wardno, disease)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- Gender value should be M male) or F(female).
- Wardno should be less than 6.

#### **Oueries:**

- a) Find the details of doctors who are treating the patient of ward no 3.
- b) Write a trigger on **PATIENTMASTER** table such that the blood group should be A,B,AB or 0.
- c) Find the details of patient who are discharge within the period 03/03/12 to 25/03/12
- d) Write a procedure on ADMIFTEDPATIENT table such as to calculate bill of all discharged patients. The charges per day for a ward is WardNo. \* 100. e.g. For ward no 3 charges/day are 300Rs.

Create a data report for the details of Doctors. Report should also include the details of patients treated by that doctor.

Duration 3:00 Hrs. Max marks: 60

#### **Instructions:**

- Read the slip carefully.
- Read the Scheinas carefully before filling records iP the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - I) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

DOCTOR (Did, Dname, Daddress, qualification)

PATIENTMASTER (<u>Pcode</u>, Pname, Padd, age, gender, bloodgroup, <u>Did</u>) ADMITTEDPATIENT (<u>Pcode</u>, Entry date, Discharge date, wardno, disease)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- Gender value should be M (male) or F(female).
- Wardno should be less than 6.

#### Oueries:

- a) Find the details of the doctors who are treating the patients of ward no 3 & display the result along with patient name & disease.
- b) Find the name of the disease by which maximum patients are suffering.
- c) Write a trigger on ADMITTEDPATIENT table such that the wardno value should be between 1-5
- d) Write a procedure to give the details of patients who are admitted in the hospital for more than 5 days.

Create a input form for doctors. Apply all possible validations.

Duration 3:00 Hrs. Max marks : 60

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using

following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

DOCTOR (Did, Dname, Daddress, qualification)

PATIENTMASTER (<u>Pcode</u>, Pnarne, Padd, age, gender, bloodgroup, <u>aid</u>) ADMITTEDPATIENT (<u>Pcode</u>, Entry date, Discharge date, wardno, disease)

# **Integrity Constraints:**

- The values of any attributes should not be null.
- Gender value should be M (male) or F(female).
- Wardno should be less than 6.

### Oueries:

- a) Find details of the patients who are treated by M.B.B.S. doctors.
- b) Find the details of patient who is suffered from blood cancer having age less than 50 years & blood group is A.
- c) write a procedure on ADMITTEDPATIENT table such as to calculate the bill of all patients. (bill no of days \* 600)
- d) Write a cursor on PATIENTMASTER table to fetch the last record & display the rows in that table.

Create a data entry for New Doctor's entry. Apply all possible validations

Duration 3:00 Hrs.

#### **Instructions:**

- Read the slip carefully.
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- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using

following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

DOCTOR (Did, Dname, Daddress, qualification)

PATIENTMASTER (<u>Pcocle</u>, Pname, Padd, age, gender, bloodgroup, <u>Did</u>) ADMITTEDPATIENT (<u>Pcode</u>, Entry date, Discharge date. wardno, disease)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- Gender value should be M (male) or F(female).
- Wardno should be less than 6.

#### **Queries:**

- a) Find details of the patients who are treated by M.S. doctors.
- b) Find the name of doctor who is treating maximum number of patients.
- c) Write a procedure to give the details of patients who are admitted in the hospital for more than 15 days.
- d) Create a view on DOCTOR & PATIENTMASTER tables. Update details of the patients who are treated by B.A. M.S. doctors **to M.B.B.S** doctor.

Create a data entry form for discharging a patient. Also give information regarding his bill. (bill no\_of\_days \* 500)

Duration 3:00 Hrs. Max marks: 60

#### **Instructions:**

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- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create

database using following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

ACCOUNT (accno, open date. acctype, balance)
TRANSACTION (trans id, trans date, accno, trans type, amount)
CUSTOMER (cust id, name, address, Accno)

### **Integrity Constraints:**

- The values of any attributes should not be null.
- acctype value should be P(Personal) or J(Joint).
- According should be less than 3 digits.
- Trans type should be C(Credit) or D(Debit)

#### Queries:

- a) Find the details of customers whose minimum balance is 1 lakhs.
- a) Find the details of amount credited within the period 25-3-2012 to 28-3-2012
- a) Write a trigger on TRANSACTION table to calculate current balance of account on which transaction is made.
- b) Write a cursor on ACCOUNT table of balance attribute such that if the balance is less than 10000 then print the 'loan is not provided'else 'loan is provided'.

Create a data entry for New account entry. Apply all possible validations

Max marks: 60

**Duration 3:00 Hrs.** 

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of
  - 1) Queries and their output..
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using

following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

ACCOUNT (accno, open date, acctype, balance)

TRANSACTION (trans id, trans date, cno, trans type, amount) CUSTOMER (cust id, name, address, accno)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- acctype value should be P(Personal) or J(Joint).
- According should be less than 3 digits.
- Trans type should be C(Credit) or D(Debit)

#### Oueries:

- a) Find the details of customers who have personal accounts & balance is less than 2 lakhs.
- b) Find the details of customers who have joint accounts.
- c) Write a trigger on ACCOUNT table such that if balance is less than 300 then customer should not withdraw the money.
- d) Write a procedure on ACCOUNT & TRANSACTION table such that as user enters new transaction the balance is, updated in ACCOUNT table.

Create a data entry for New customer entry. Apply all possible validations.

Duration 3:00 Hrs. Max marks: 60

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using following schema. Apply given integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

ACCOUNT (accno, open date. acctype, balance)

TRANSACTION (trans id, trans date, accno, trans type, amount) CUSTOMER (cust id, name, address. accno)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- acctype value should be P(Personal) or Moira):
- Accord should be less than 3 digits.
- Transtype should be C(Credit) or D(Debit)

### **Queries:**

- a) Find the details of all transactions performed on account number 101. Also specify the name/names of cutomers who owns that account.
- b) Find the details of amount credited within the period 15 -3-2012 to 18 -3 -2012.
- c) Write a trigger on insert on ACCOUNT table such that the account which is having balance less than or equal to 500 should not be debited.
- d) Write a procedure on ACCOUNT table to calculate interest on current balance from open date to today's date. (Take interest rate from user).

Create a data entry for New account entry. Apply all possible validations.

# Internal Practical Examination Apr-2025 Duration 3:00 Hrs. CA-LAB IV (NEW): Lab on DBMS

Max marks: 60

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately go that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - I) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

cursor, views along with their output.

.Creat4

database using following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

ACCOUNT (accno, open date, acctype, balance)

TRANSACTION (trans id, trans date, accno, trans type, amount)

CUSTOMER (cust id name, address, accno)

# **Integrity Constraints:**

- The values of any attributes should not be null.
- acctype value should be P(Personal) or Moira).
- According should be less than 3 digits.
- Trans type should be C(Credit) or D(Debit)

### Oueries:

- a) Find the details of customers who have opened the accounts within the period 25-3-2012 to 28-3-2012.
- b) Find the details of customers who have joint accounts & balance is less than 2 lakhs.
- c) Write a trigger TRANSACTION on table to calculate the current balance of the account on which transaction is made.
- a) write a cursor on CUSTOMER table to fetch the last row.

Create a data entry for New customer entry. Apply all possible validations.

## North Maharashtra University, Jalgaon

# Note the All Practical residual residua

Duration 3:00 Hrs. Max marks : 60

#### Instructions:

- Read the slip carefully.
- R-ead-theSchernas vatefuttyliefore finitig'retordsinlhe tableikftittl<sup>y</sup>erecords appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 0) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create

database using following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in eae,h table).

EMPLOYEE (fname, Mame, ssn, sex, salary, joindate, superssn, dno,) DEPT (dname, dnum, mgrssn, dlocation)
PROJECT (pname, pno, plocation, dnumber)

WORK ON (ssn, pno, hours)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- The deptno should less than 4 digit
- ssn -(social security no of-employee)
- mgrssn(manager social security no)
- superssn(supervisor social securit)' no)

## **Queries:**

- a) For every project located in 'jalgaon". List the pno,the controlling detptno and dept manager last name.
- b) For each project on which more than two employee work, Find the pno, pname & no. of employees who work on the project.
- a) create a view that has the deptname,manager name & manager salary for every dept.
- a) Express the following constraint as SQL assertions "salary of employee must not be greater than the salary of the manager of the dept".

Create a data entry for New employee entry. Apply all possible validations.

## North Maharashtra University, Jalgaon

# Note the All Practistal random various, April 2025 CA-LAB IV (NEW): Lab on DBMS

Duration 3:00 Hrs. Max marks : 60

#### **Instructions:**

- Read the slip carefully.
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- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

EMPLOYEE (fname, lname, ssn, sex, salary, joindate, superssn, dno,)
DEPT (dname, dnum, En\_grssn, (llocation)
PROJECT (pname, pno, plocation, dnumber)
WORK ON (5sn, pno, hours)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- The deptno should less than 4 digit
- Ssn (social security no of employee)
- Mgrssn(managersocial security no)
- <sup>a</sup> Superssn(supervisor social security no)

#### Queries:

- a) For each employee, Find the employee first & last name & the first & last name of his or her immediate supervisor.
- b) For each dept, Find the deptno, the no. of employees in the dept & their average salary.
- c) Create a view that has pname, controlling dept name, no of employees, & total hours worked per week on the project for each project with more than one employee working on it.
- d) Create a procedure on EMPLOYEE table to determine the employees who will get promotion. (An employee will get promotion after working on 5 projects.)

Create a data report showing the information of all female employees working in "Research" department.

# Note the All Piractical of Alamantion Alate 2025 **CA-LAB IV (NEW): Lab on DBMS**

Duration 3:00 Hrs. Max marks: 60

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using following schema. Apply given Integrity Constraints and answer the following gueries using SQL. (Fill up database with at least 10 records in eaCh table).

EMPLOYEE (fna.me, Mame, ssn. sex, salary, joindate.superssn.

<u>dno4</u>) DEPT ( dname, <u>dnum, mgrssn,</u> dlocation)

PROJECT (pname, pno, plocation, dnumber)

WORK ON (ssn, pno, hours)

## **Integrity Constraints:**

- The values of any attributes should not be null. The deptno should less than 4 digit
- Ssn (social security no of employee)
- Mgrssn(manager social security no)
- Superssn(supervisor social security no)

#### Queries:

- a) Find the ssn of all employees who work on pno 101, 102 or 103.
- b) Make a list of all pno for project that involve an employee whose last name is 'sonar' either as a worker or as a manager of the dept that control the project.
- a) Write a trigger on insert on WORK ON table such that if total work hours of employee in company is less than 20 hours then his salary is deducted.
- a) Write a cursor on PROJECT table to fetch the first row from the table & display the total number of rows present in the table.

Create a data report showing the information of all the projects and names of employees working on individual projects.

# **Internal Practical Examination Apr-2025**

CA-LAB IV (NEW): Lab on DBMS

Duration 3:00 Hrs. Max marks: 60

## **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

BOOKMASTER (bid, title, author, price)

STUDENTMASTER (stud enrollno, sname, class, dept)

ACCESSIONTABLE (bid, accession no, avail)

ISSUETABLE(issueid,accession <u>no.stud</u> enrollno,issuedate,cluedate, ret\_date,bid)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- Avail should be T ( if book is not issue ) or F (if book is issue)

#### Queries:

- a) Find the name of books which is issued maximum times.
- b) Find the detail information of books that are issued by computer department students.
- c) Write a procedure to calculate the fines for the books which are not return on or before due date. no.of days = (ret\_date due\_date) fine = no.of days (ret\_date due\_date) \* 10
- d) Write a trigger on insert of ISSUETABLE such that duedate = issuedate + 7

Create a data report that display the information of all books available in the library.

#### **Duration 3:00 Hrs.**

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the
- recOrds'aPPropriateli<sup>s</sup>s6iliat<sup>-</sup>Menti6ned qUerieS can be executed.
  - The underline attributes is primary key & double underline attributes are foreign keys.
  - Take Printout of:
    - 1) Queries and their output.
    - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Max marks: 60

Create database using

following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

BOOKMASTER (bid, title, author, price)

STUDENTMASTER (stud enrollno, snaine, class, dept)

ACCESSIONTABLE ( <u>accession no, avail</u>)

fiMUETABLE(issueid,as ussion <u>no, stud</u> earalno, issuedate, duedate, ret date, bi, d)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- Avail should be T ( if book is not issue ) or 1' (if book is issue)

### Queries:

- a) Find the detail information of the students who have issued books Between two given dates.
- b) Create a view that display all the accession infortnatiOn for a book having bid = 100
- c) Write a cursor to fetch last record from view in (b).
- d) Find the information of books issued by MCA students.

Create a input form for new book issue. Apply all possible validations.

Duration 3:00 Hrs. Max marks: 60

## **Instructions:**

- **Read** the slip carefully.
- Read the Schemas carefully before tilling records in the table & fill the
- records appropriately so that mentioned queries can be executed.
  - The underline attributes is primary key & double underline attributes are foreign keys.
  - Take Printout of:
    - 1) Queries and their output.
    - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using

following schema. Apply given Integrity Constraints and answer the followingqueries using SQL. (Fill up database with at least 10 records ir+ eaoh,tab4e).

BOOKMASTER (bid, title, author, price)

STUDENTMASTER (stud enroll no, sname, class, dept)

ACCESSIONTABLE (bid, accession no, avail)

SUETABLE(issueid,accessipn no.stl.KLmrsillag,issuedate,cluedate, ret\_date,hisp

# **Integrity Constraints:**

- The values of any attributes should not be null.
- Avail should be T ( if book is not issue ) or F (if book i8 issue)

#### Queries:

- a) Write a procedure for giving the detail information of books available in the library.
- a) Find the number of books issued by each student.
- a) Write a trigger such that the return date should not exceed today's date.
- b) Find the number of books available in the library & written by "Henry Korth".

Create a class wise issue report of books.

Duration 3:00 Hrs. Max marks : 60

#### **Instructions:**

- **Read** the slip carefully.
- Read the Schemas carefully before tilling records in the table & fill the
- records appropriately so that mentioned queries can be executed.
  - The underline attributes is primary key & double underline attributes are foreign keys.
  - Take Printout of:
    - 1) Queries and their output.
    - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create

database using following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in •aa table).

EMPLOYEE (fname, lname, ssn, sex, salary, joindate, superssn, dno,) DEPT (dname, dnum, mgrssn, dlocation)
PROJECT (pname, pno, plocation, &lumber)
WORK ON (ssn, pno, hours)

# **Integrity Constraints:**

- The values of any attributes should not be null.
- The deptno should less than 4 digit
- ssn (social security no of employee)
- mgrssn(manager social security no)
- superssn(supervisor\_social\_security\_no)

## **Queries:**

- a) For every project located in `jalgaon'. List the pno,the controlling detptno and dept manager last name.
- b) For each project on which more than two employee work, Find the pno, pnarne & no. of employees who work on the project.
- c) create a view that has the deptna.me,manager name 8z manager salary for every dept.
- d) Express the following constraint as SQL assertions "salary of employee must not be greater than the salary of the manager of the dept".

Create a data entry for New employee entry. Apply all possible validations.

#### 4.

# Internal Practical Examination Apr-2025 CA-LAB IV (NEW) : Lab on DBMS

Duration 3:00 Hrs. Max marks : 60

#### **Instructions**:

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be .executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
  - Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Creat4 database

using following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

ACCOUNT (accno, open date, acctype, balance)

TRANSACTION (trans id, trans date, accno. trans\_type, amount) CUSTOMER (cust id name, address, accno)

# **Integrity Constraints:**

- The values of any attributes should not be null.
- acctype value should be P(Personal) or J(Joint).
- Accord should be less than 3 digits.
- Trans\_type should be C(Credit) or D(Debit)

## Oueries:

- a) Find the details of customers who have opened the accounts within the period 25-3-2006 to 28-3-2006.
- b) Find the details of customers who have joint accounts & balance is less than 2 lakhs.
- c) Write a trigger TRANSACTION on table to calculate the current balance of the account on which transaction is made.
  - ( if trans\_type = c then bal = bal + amt else if trans\_type = d then bal bal amt)
- a) write a cursor on CUSTOMER table to fetch the last row.

Create a data entry for New customer entry. Apply all possible validations.

Duration 3:00 Hrs. Max marks: 60

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key & double underline attributes are foreign keys.
- 'fake Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create

database using following schema. Apply given Integrity Constraints and answer the following queries using SQL.(Fill up database with at least 10 records in each table).

PRODUCT ( Maker, <u>.Modelno</u>, Type ) PC( 4.oc jeki,o, Speed, RAM, HD, CD, Price ) LAPTOP ( <u>Modelno</u>, Speed, RAM, HD, Price ) PRINTER ( Mosklm, Color, Type, Price )

# **Details regarding Schemas**

- PC relation contains model no. of PC, its speed in MHz, RAM in MB, HD size in GB, Speed of CD reader, and price.
- The value for Maker in Product table can be IBM, Compaq,etc.
- PRINTER relation contains model no., value of Color should be T(if printer is color) or F (if printer is black & white), type(laser, ink-jet, dot- matrix or dry), and price.

# **Integrity Constraints:**

- The values of any attributes should not be null.
- Product Type should one of these (PC, Laptop or Printer)

#### Queries:

- a) Find the manufacturers of color printers.
- b) Find the laptops whose speed is slower than that of any PC.
- Express the following constraint as SQL assertions "No black & white printer should have price greater than color printers."
- d) write a trigger on PC & LAPTOP table such that the hard disk size should be greater than 20 GB

Duration 3:00 firs. Max marks: 60

#### **Instructions:**

- Read the slip carefully.
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- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - I) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

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Create database

using following schema. Apply given Integrity Constraints and answer the following queries using SQL.(Fill up database with at least 10 records in each table).

PRODUCT (Maker, Modelno, Type)

PC (Ivlodeln, Speed, RAM, HD, CD, Price)

LAPTOP (Rh, Speed, RAM, HD, Price)

PRINTER ( Model, Color, Type, Price )

## Details regarding Schemas

- PC relation contains model no. of PC, its speed in MHz, RAM in MB, HD size in GB, Speed of CD reader, and price.
- The value for Maker in Product table can be IBM, Compagetc.
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Duration 3:00 Hrs. Max marks: 60

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- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create

database using following schema. Apply given Integrity Constraints and answer the following queries using SQL.(Fill up database with at least 10 records in each table).

PRODUCT ( Maker, <u>Modelno, Type</u> )
PC ( <u>Modelno, Speed, RAM, HD, CD, Price</u> )
LAPTOP ( Modelno, Speed, RAM, HD, Price )
PRINTER ( <u>Modelno, Color, Type, Price</u> )

# **Details regarding Schemas**

- PC relation contains model no. of PC, its speed in MHz, RAM in MB, HD size in GB, Speed of CD reader, and price.
- The value for Maker in Product table can be IBM, Compaq,etc.
- PRINTER relation contains model no., value of Color should be T(if printer is color) or F (if printer is black & white), type(laser, ink-jet, dot-matrix or dry), and price.

# **Integrity Constraints:**

- The values of any attributes should not be null.
- Product Type should one of these (PC, Laptop or Printer).

## Queries:

- a) Find the different types of printers produced by Epson.
- b) Find those hard disk sizes which occur in two or more PC's.
- c) Write a trigger on LAPTOP table such that the minimum speed should be 120MHz.
- d) Demonstrate the use of cursor using PRODUCT table.

Duration 3:00 Hrs. Max marks: 60

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
   The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create

database using following schema. Apply given Integrity Constraints and answer the following queries using SQL.(Fill up database with at least 10 records in each table).

\*PRODUCT ( Maker, <u>Modelno</u>, Type )

PC (Modelno, Speed, RAM, HD, CD, Price)

LAPTOP (Modelno, Speed, RAM, HD, Price)

PRINTER (1Viodelno, Color, Type, Price)

# **Details regarding Schemas**

- PC relation contains model no. of PC, its speed in MHz, RAM in MB, HD size in GB, Speed of CD reader, and price.
- The value for Maker in Product table can be IBM, Compacketc.
- PRINTER relation contains model no., value of Color should be T(if printer is color) or F (if printer is black & white), type(laser, ink-jet, dot- matrix or dry), and price.

# **Integrity Constraints:**

- The values of any attributes should not be null.
- Product Type should one of these (PC, Laptop or Printer)

# Queries:

- a) Find the different types of printers produced by Epson.
- b) Find those hard disk sizes which occur in two or more PC's.
- c) Write a trigger on LAPTOP table such that the minimum speed should be 1201v1Hz.
- d) Demonstrate the use of cursor using PRODUCT table.

Duration 3:00 Hrs. Max marks: 60

### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key &. double underline attributes are foreign keys.
- Take Printout of:
  - I) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using following schema. Apply given Integrity Constraints and answer the following queries using

SQL.(Fill up database with at least 10 records in each table).

PRODUCT( Maker, Modelno, Type )

PC (Modelno, Speed, RAM, HD, CD, Price)

LAPTOP (Modetno, Speed, RAM, HD, Price)

PRINTER (ModelaQ, Color, Type. Price)

#### **Details regarding Schemas**

- PC relation contains model no. of PC, its speed in MHz, RAM in MB, HD size in GB, Speed of CD reader, and price.
- The value for Maker in Product table can be 113M, Compaq,etc.
- PRINTER relation contains model no., value of Color should be T(if printer is color) or F (if printer is black & white), type(laser, ink-jet, dot- matrix or dry), and price.

#### **Integrity Constraints:**

- The values of any attributes should not be null.
- Product Type should one of these (PC, Laptop or Printer)

#### Oueries:

- a) Find PC models having a speed of at least 150 MHz.
- b) Find those manufacturers that sell Laptops, but not PC's.
- c) Write a trigger on LAPTOP table such that the price should not less than 30000
- a) Write a procedure to find the manufacturer who has produced the most expensive laptop.

Duration 3:00 firs. Max marks : 60

#### **Instructions:**

- Read the slip carefully.
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- The underline attributes is primary key & double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using

following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

DOCTOR (Did, Dname, Daddress, qualification)

PATIENTMASTER (<u>Pcode</u>, Pname, Padd, age, gender, bloodgroup, <u>Did</u>) ADMITTEDPATIENT (<u>Pcode</u>, Entry date, Discharge\_clate, wardno, disease)

## **Integrity Constraints:**

- The values of any attributes should not be null.
- Gender value should be M (male) or F(feinale).
- Wardno should be less than 6. Queries:
  - a) Find the details of patient who are admitted within the period 03/03/08 to 25/03/08.
  - b) Find the names of doctors who are treating Jalf zaon patients.
  - c) write a procedure on ADMITTEDPATIENT table such as to calculate the bill of all patients currently admitted in the hospital.

$$(bill = no _of_days * 500)$$

d) Write a trigger on Doctor table such that the specialization should be :- M.B.B.S./B.A.M.S/M.S.

Create a data entry form for new DOCTOR. Apply all possible validations.

Duration 3:00 Hrs. Max marks : 60

#### **Instructions:**

- Read the slip carefully.
- Read the Schemas carefully before filling records in the table & fill the records appropriately so that mentioned queries can be executed.
- The underline attributes is primary key &, double underline attributes are foreign keys.
- Take Printout of:
  - 1) Queries and their output.
  - 2) Code if written by you for generating report, input form, trigger, assertion, cursor, views along with their output.

Create database using

following schema. Apply given Integrity Constraints and answer the following queries using SQL. (Fill up database with at least 10 records in each table).

DOCTOR (Did. Dname, Daddress, qualification)

PATIENTMASTER (Pcode, Pname, Padd, age, gender, bloodgroup, <u>Did)</u> ADMITTEDPATIENT (Pcode, Entry date, Discharge date, warcino, disease)

# **Integrity Constraints:**

- The values of any attributes should not be null.
- Gender value should be .M (male) or F(female).
- Wardno should be less than 6.

#### Oueries:

- a) Find details of the patients who are treated by M.B.B.S. doctors.
- b) Find name of the doctor who are treating the male patients suffering from disease brain tumor & having age less than 40 years.
- c) write a procedure on ADMITTEDPATIENT table such as to calculate the bill of all patients who are discharged on 30-3-2008 .
  - (bill no of days \* 500)
- d) write a cursor on DOCTOR table to fetch the first row & display the number of rows present in the table.

Create a data entry form for new patient. Apply all possible validations.