DBMS

*Lab*

**PART - C**

# 1. Write a PL/SQL program to compute the selling price of books depending on the book code and category. Use Open, Fetch and Close. The Book\_detail table contains columns Book Code, Author, Title, Category and Price. Insert 10 records. The selling price = Price – Discount. The discount is calculated as follows:

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# Print the result in a tabular form with proper alignment.

Book\_code Category Title Author Price Discount % Disc.Amt Selling\_Price

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insert into book values('A','Tolstoy','War and peace','Novel','500');

1 row(s) inserted.

select \* from book;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **BOOKCODE** | **AUTHOR** | **TITLE** | **CATEGORY** | **PRICE** |
| A | Tolstoy | War and peace | Novel | 500 |
| A | Walter Isaacson | Steve Jobs | Technology | 1800 |
| B | Napoleon Hill | Think and Grow Rich | Commerce | 700 |
| B | Richard Dawkins | The selfish Gene | science | 800 |
| C | jefferson Airplane | Rejoyse | song | 450 |
| C | Milkha Singh | The race of my life | sports | 100 |
| D | Rashmi | Touch the sky | others | 550 |

# 2. Write a PL/SQL program to display employee pay bill (using Cursor For loop). Use a procedure to receive basic pay and to compute DA, HRA, Tax, PF, Gross Pay and Net pay (Use OUT). Base table contains the columns empnum, empname, basic pay. Insert 3 records.

# Allowances are computed as follows:

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# Gross = Basic + DA + HRA; PF = 12% of Gross or Rs. 2000, whichever is minimum. PT = Rs. 100 upto Gross is 25,000; else Rs. 200, Net = Gross – (PF +PT)

# Print Pay slip as follows:

# 

# 

# 3. Given the following tables: ITEM\_MASTER (itemno, name, stock, unit\_price) [Apply the Primary key and check constraint for stock and price as >0) [Insert 5 records]

# ITEM\_TRANS (itemno, quantity and trans\_date)

# Create a package PCK\_ITEM includes a function CHK\_ITEM and a procedure PROC\_ITEM. Function CHK\_ITEM gets one argument itemno and is used to check whether the parameter itemno exists in ITEM\_MASTER and should return 1 if exist. Otherwise 0 and display proper message.

# Procedure PROC\_ITEM gets two arguments itemno and quantity, and is used to perform the following if item exists. If required quantity is not available, give appropriate message. If available, insert a record of this transaction to ITEM\_TRANS and modify the stock in ITEM\_MASTER.

# Write a PL/SQL program to accept ITEM\_NO and Quantity needed of required item. Use

# Package to do the transaction process (Transaction date can be current date). OUTPUT to be shown as follows:

# 

# 4. Consider the following tables:

# LIBRARY (Accession no, Title, Author, Publication, Status). Status can be A for available and I for Issued. Insert 3 records with status ‘A’ for all initially.

# ISSUE (Rollno, Accession no, Borrowdate, returndate). OUTDATED (Accession no, Title, Author, Publication, tdate). Write the following Trigger programs.

# Whenever the book is to be issued, insert a new record to ISSUE without having return date. When the record is inserted to ISSUE table, trigger TRIG\_ISSUE to be executed to update status in LIBRARY as ‘*I’.*

# Whenever book is returned, update return date of that record as todays date in ISSUE table. When the record is updated to ISSUE table, trigger TRIG\_ISSUE to be executed to update status in LIBRARY as ‘*A’.*

# Whenever the book is deleted by accepting Accession no. for status ‘A’ (at SQL >), trigger TRIG\_OUTDATE has to be executed to insert a record to OUTDATED.

# Write a PL/SQL program to accept Rollno, Accession no. and transaction (B for Borrow and R for Return). Check for the existence of a given Accession no. and proceed as follows.

# If does not exist , display the message ‘Given accession no. is not available’

# If exist and transaction is B, check the status as ‘A’, then insert to ISSUE, and display the message with accno, author, title, publication and roll no to whom it is issued .

# If exist and transaction is R, then update return date as current system date in ISSUE by accepting Rollno and Aceession no (for the record having return date empty.)

# If searched record is not available, raise the predefined exception.