Aim: Unnamed PL/SQL code block: Use of Control structure and Exception handling is

mandatory. Write a PL/SQL block of code for the following requirements:-

Schema:

1. Borrower(Rollno, Name, DateofIssue, NameofBook, Status)

2. Fine(Roll\_no,Date,Amt)

 Accept roll\_no & name of book from user.

 Check the number of days (from date of issue), if days are between 15 to 30 then fine

amount will be Rs 5 per day.

 If no. of days>30, per day fine will be Rs 50 per day & for days less than 30, Rs. 5 per

day.

 After submitting the book, status will change from I to R.

 If condition of fine is true, then details will be stored into fine table.

\*\*\*\*\*\*\*Create table fine and Borrower:\*\*\*\*\*\*\*

SQL> create table borrower(rollno int, name char(10), dateofissue date, nameofbook

char(10), status char(10));

Table created.

SQL> create table fine(rollno int, fdate date, amt int);

Table created.

SQL> desc borrower;

Name Null? Type

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ROLLNO NUMBER(38)

NAME CHAR(10)

DATEOFISSUE DATE

NAMEOFBOOK CHAR(10)

STATUS CHAR(10)

SQL> desc fine;

Name Null? Type

----------------------------------------- -------- ----------------------------

ROLLNO NUMBER(38)

FDATE DATE

AMT NUMBER(38)

\*\*\*\*\*\*\* Insert values into Borrower table: \*\*\*\*\*\*\*

SQL> Insert into borrower values (101, 'Ram',to\_date('20170923','YYYYMMDD'),'DBM

S', 'I');

1 row created.

SQL> Insert into borrower values (102, 'Sai',to\_date('20170910','YYYYMMDD'),'CN', 'I');

1 row created.

SQL> Insert into borrower values (103, 'Laxman',to\_date('20170928','YYYYMMDD'),'TOC',

'I');

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1 row created.

SQL> Insert into borrower values (104, 'Sai',to\_date('20170825','YYYYMMDD'),'SEPM','I');

1 row created.

SQL> Insert into borrower values (105, 'Ganesh',to\_date('20170901','YYYYMMDD'),'IEEE',

'I');

1 row created.

SQL>

SQL> select \* from borrower;

ROLLNO NAME DATEOFISS NAMEOFBOOK STATUS

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101 Ram 23-SEP-17 DBMS I

102 Sai 10-SEP-17 CN I

103 Laxman 28-SEP-17 TOC I

104 Sai 25-AUG-17 SEPM I

105 Ganesh 01-SEP-17 IEEE I

SQL> select \* from fine;

no rows selected

\*\*\*\*\*\*\*Procedure for Calculating fine: \*\*\*\*\*\*\*

DECLARE

p\_nameofbook char(50);

p\_rollno number(3);

p\_dateofissue date;

currentdate date;

noofdays number(2);

amount number;

nodata EXCEPTION;

BEGIN

p\_rollno := &rollno;

p\_nameofbook := '&nameofbook';

currentdate := trunc(SYSDATE);

IF p\_rollno <= 0 THEN

RAISE nodata;

END IF;

SELECT dateofissue into p\_dateofissue FROM borrower WHERE rollno = p\_rollno

AND nameofbook =p\_nameofbook;

SELECT trunc(SYSDATE) - p\_dateofissue INTO noofdays from dual;

dbms\_output.put\_line ('No of Days:' || noofdays);

IF (noofdays > 30) THEN amount:= noofdays \* 50;

ELSIF (noofdays >= 15 AND noofdays <=30) THEN amount:= noofdays \* 5;

END IF;

IF amount > 0 THEN

INSERT INTO Fine values (p\_rollno, sysdate, amount);

END IF;

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UPDATE Borrower SET Status = 'R' WHERE rollno=p\_rollno;

EXCEPTION

WHEN nodata THEN

dbms\_output.put\_line('!!!!!Roll Number not found!!!!!');

END;

/

\*\*\*\*\* Output \*\*\*\*\*

Enter value for rollno: 101

old 9: p\_rollno := &rollno;

new 9: p\_rollno := 101;

Enter value for nameofbook: DBMS

old 10: p\_nameofbook := '&nameofbook';

new 10: p\_nameofbook := 'DBMS';

PL/SQL procedure successfully completed.

SQL> select \* from fine;

no rows selected

SQL> select \* from borrower;

ROLLNO NAME DATEOFISS NAMEOFBOOK STATUS

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101 Ram 23-SEP-17 DBMS R

102 Sai 10-SEP-17 CN I

103 Laxman 28-SEP-17 TOC I

104 Sai 25-AUG-17 SEPM I

105 Ganesh 01-SEP-17 IEEE I

SQL>

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Enter value for rollno: 102

old 9: p\_rollno := &rollno;

new 9: p\_rollno := 102;

Enter value for nameofbook: CN

old 10: p\_nameofbook := '&nameofbook';

new 10: p\_nameofbook := 'CN';

PL/SQL procedure successfully completed.

SQL> select \* from borrower;

ROLLNO NAME DATEOFISS NAMEOFBOOK STATUS

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101 Ram 23-SEP-17 DBMS R

102 Sai 10-SEP-17 CN R

103 Laxman 28-SEP-17 TOC I

104 Sai 25-AUG-17 SEPM I

105 Ganesh 01-SEP-17 IEEE I

SQL> select \* from fine;

ROLLNO FDATE AMT

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102 28-SEP-17 90

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Enter value for rollno: 105

old 9: p\_rollno := &rollno;

new 9: p\_rollno := 105;

Enter value for nameofbook: IEEE

old 10: p\_nameofbook := '&nameofbook';

new 10: p\_nameofbook := 'IEEE';

PL/SQL procedure successfully completed.

SQL> select \* from fine;

ROLLNO FDATE AMT

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102 28-SEP-17 90

105 28-SEP-17 135

SQL> select \* from borrower;

ROLLNO NAME DATEOFISS NAMEOFBOOK STATUS

---------- ---------- --------- ---------- ----------

101 Ram 23-SEP-17 DBMS R

102 Sai 10-SEP-17 CN R

103 Laxman 28-SEP-17 TOC I

104 Sai 25-AUG-17 SEPM I

105 Ganesh 01-SEP-17 IEEE R

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Enter value for rollno: 104

old 9: p\_rollno := &rollno;

new 9: p\_rollno := 104;

Enter value for nameofbook: SEPM

old 10: p\_nameofbook := '&nameofbook';

new 10: p\_nameofbook := 'SEPM';

PL/SQL procedure successfully completed.

SQL> select \* from fine;

ROLLNO FDATE AMT

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102 28-SEP-17 90

105 28-SEP-17 135

104 28-SEP-17 1700

SQL> Select \* from borrower;

ROLLNO NAME DATEOFISS NAMEOFBOOK STATUS

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101 Ram 23-SEP-17 DBMS R

102 Sai 10-SEP-17 CN R

103 Laxman 28-SEP-17 TOC I

104 Sai 25-AUG-17 SEPM R

105 Ganesh 01-SEP-17 IEEE R