[Total No. of Questions :5]

SEAT No. :

[Total No. of Pages : 3]

F.Y. B.B.A. (CA)

CA - 204 : RELATIONAL DATABASE MANAGEMENT SYSTEM (RDBMS)

(2019 Pattern) (Semester - II)

[Time : 2½ Hours] *[Max. Marks : 70]*

Instructions to the candidates:

1) *Total number of questions are 5.*
2) *Figures to the right indicate full marks.*

Q1) Attempt any EIGHT of the following (Out of TEN) : [8 × 2 = 16]

a) State advantages of RDBMS.

b) What is an Exception?

c) What is Trigger?

d) What is transaction?

e) What types of Schedule?

f) What is Locking?

g) What is Cursor?

h) What is Checkpoint?

i) What is Isolation?

j) What are types of lock?

Q2) Attempt any FOUR of the following (Out of FIVE) : [4 × 4 = 16]

a) What is different between RDBMS and DBMS?

b) State Advantage of PL/SQL.

c) Explain properties of transaction.

d) Explain.how deadlock is recovered.

e) Explain data types in PL/SQL.

P.T.O.

Q3) **Attempt any FOUR of the following (Out of FIVE) :** **[4 × 4 = 16]**

a) What is function? Explain with an example.

b) Explain predefined exceptions.

c) What is block?List its types?

d) What is deadlock?Explain deadlock detection.

e) Explain transaction states?

Q4) **Attempt any FOUR of the following (Out of FIVE) :** **[4 × 4 = 16]**

a) Consider following relational database.

Customer(Cno, Cname, Ccity)

Loan(Lno,Lamt,Years,Cno)

Write a Procedure to display total Loan amount from pune city.

b) Consider the following transaction. Give two non-serial schedules that the Serializable.

T1	T2
Read(X)	Read(B)
X = A + 100	B = B + 100
Write(X)	Write(B)
Read(Y)	Read(C)
Y = Y +Z	C = C + 100
Write(Y)	Write(C)

c) Consider the following relational database :

Book (bno, bname,pubname,price, dno)

Dept (dno, dname,Location)

Write a Function which will return total expenditure on books of a given Department.

P.T.O.

d) Following is the list of events in an interleaved execution of set T1,T2,T3. Assuming 2PL (Two Phase Lock). Is there a deadlock? If yes, which transactions are involved in deadlock?

Time	Transaction	Code
t_1	T1	Lock(A,X)
t_2	T2	Lock(B,S)
t_3	T3	Lock(A,S)
t_4	T1	Lock(C,X)
t_5	T2	Lock(D,X)
t_6	T1	Lock(D,S)
t_7	T2	Lock(C,S)

e) Print the number of 1 to 10 using Loop.

Q5) **Write a short note on ANY <u>TWO</u> of the following (Out of THREE) :** **[2 × 3 = 6]**

a) Features of RDBMS.

b) Features of PLSQL.

c) What is Starvation.