

014

SOUTH EASTERN UNIVERSITY OF SRI LANKA

FINAL EXAMINATION IN BACHELOR OF BUSINESS ADMINISTRATION AND
COMMERCE - 2009/2010

SEMESTER-1, AUGUST-2011

MIS 4113 – Advance Relational Database

Answer all questions

Time: 3 Hours

Q1.

- i. Explain Relational Database Management System (RDBMS) and the benefits of using RDBMS?
- ii. Explain different types of Database Design Architectures with suitable illustration?
- iii. Differentiate the database connectivity methods ODBC from ADO?
- iv. Explain the Data Manipulation Languages from Data Definition Language with their SQL Statement syntax?

(Total 5×4 =20 Marks)

Q2.

- i. Illustrate the database system structure components?
- ii. Explain the oracle database Logical structure components?
- iii. Differentiate data blocks, extents and segments related with oracle database environment?
- iv. Write the SQL statement syntax to create the **employee** table, insert 3 row data to this table and change the table name as **emp** in oracle SQL*PLUS environment.(use sample table field and data)

(Total 5×4 =20 Marks)

Q3.

Instance of the dream-mahaal rental Database.

Branch

BranchNo	Street	City	postcode
B005	22deer Rd	London	SW 4EH
B007	16 Argyll St	Aberdeen	AB2 3SU

B003	163 Main St	Glasgow	G11 9QX
B004	32 Manse Rd	Bristol	BS99 1NZ
B002	56 Clover Dr	London	NW106EU

Staff

Staffno	Fname	Lname	Position	Sex	DOB	Salary	branchno
SL21	John	White	Manger	M	1-Oct-45	30000	B005
SG37	Ann	Beech	Assistant	F	10-Nov-	12000	B003
SG14	David	Ford	Supervisor	M	60	18000	B003
SA9	Mary	Howe	Assistant	F	24-Mar-	9000	B007
SG5	Susan	Rand	Manager	F	58	24000	B003
SL41	Julie	Lee	Assistant	F	19-Feb-	9000	B005
					70		
					3-Jun-40		
					13-Jun-		
					65		

PropertyForRent

Propertyno	Street	City	Postcode	Type	Rooms	Rent	Ownerno	Staffno	branchno
PA14	16 Hollhead	Aberdee	AB7 5SU	Hous	6	650	CO46	SA9	B005
PL94	6 Argyll St	n	NW2	e	4	400	CO87	SL41	B003
PG4	6 Lawrance	London	G11 9QX	Flat	3	350	CO40		B003
PG36	St	Glasgow	G32 4QX	Flat	3	375	CO93	SG37	B003
PG21	2 Manor Rd	Glasgow	G12	Flat	5	600	CO87	SG37	B003
PG16	18 Dale Rd	Glasgow	G12 9AX	Hous	4	450	CO93	SG14	B003
	5 Novar Dr	Glasgow		e					
				Flat					

Client

Clientno	Fname	Lname	Telno	PrefType	maxRent
CR76	John	Kay	0207-774-	Flat	425
CR56	Aline	Steward	5632	Flat	350
CR74	Mike	Ritchie	0141-848-	House	750
CR62	Mary	tregear	1825	Flat	600
			01475-		
			392878		
			01124-		
			196720		

PrivateOwner

Ownerno	Fname	Lname	Address	telno
CO46	Joe	Koegh	2 Fergus Dr, Aberdeen AB2 7SX	01224-861212
CO87	Carol	Farrel	6Achray St, Glasgow G32 9DX	0141-357-7419
CO40	Tina	Murphy	63 Well St, Glasgow G42	0141-943-1728
CO93	Tony	Shaw	12 Park Pl, Glasgow G4 0QR	0141-225-7025

Viewing

Clientno	Propertyno	Viewdate	comment
CR56	PA14	24-May-04	Too small
CR76	PG4	20-May-04	Too remote
CR56	PG4	26-May-04	
CR62	PA14	14-May-04	No dining room
CR56	PG36	28-Apr-04	

Registration

Clientno	Branchno	Staffno	datejoined
CR76	B005	SL41	2-Jan-04
CR56	B003	SG37	11-Apr-03
CR74	B003	SG37	16-Nov-02
CR62	B007	SA9	7-Mar-03

Implement SQL queries for the following:

- i. Find all private owners who have properties at Glasgow. (3 Marks)

- ii. Find number of staff members in each branch where more than one employees and display sum of their salaries. (4 Marks)

- iii. List all cities where there is a branch and not having a property for rent. (4 Marks)

- iv. List all clients who have viewed properties greater than the average rent. (4 Marks)

- v. List first name of the clients' who have viewed more than one property. (5 Marks)

(Total 20 Marks)

Q4.

- i. Explain the System Global Area Components with related to Oracle Database Memory Structure?
- ii. Define data integrity with suitable example?
- iii. Distinguish Transaction Control Statement from Session Control Statement?
- iv. Differentiate store procedure, triggers and cursor related with oracle environment?

(Total 5×4 =20 Marks)

Q5.

- i. Describe oracle grid architecture and its database application architecture?
- ii. Differentiate SQL, PL/SQL and SQL*PLUS related with oracle database environment
- iii. Explain how database objects are differ from database schema?
- iv. Assume if you are assigned as the Database Administrator in your organization, Explain what are the security policies would you follow to manage and protect your large Database System.

(Total 5×4 =20 Marks)