

COS 502.2

Reg. No.

CREDIT BASED FIFTH SEMESTER B.Sc. DEGREE EXAMINATION OCTOBER 2012
COMPUTER SCIENCE
PAPER VI – RDBMS AND ORACLE

Time: 3 Hrs

Max. Marks: 80

PART – A

1. Answer any TEN questions from the following:

2x10=20

- a) What do you mean by recursive relationship? Give an example.

- b) Name the different types of Data Base users.
- c) What is the difference between Procedural and Non Procedural DML?
- d) Draw the symbol used in E-R diagram for
 - 1. Key attribute
 - 2. Composite attribute
- e) Write any 2 characteristics of Relational DBMS model.
- f) Differentiate between order by and group by.
- g) Explain how to connect multiple tables in Oracle.
- h) What do you mean by Nested Query? Give an example.
- i) List any 2 cases where the use of a NOT NULL constraint would be appropriate.
- j) Explain the two forms of writing comments in PUSQL program.
- k) Mention the two methods of writing comment statements in Oracle.
- l) Write the syntax to create a trigger.?

PART – B

Answer any TWO questions from each unit.

UNIT – I

- 2. a) What are the advantages of DBMS over Conventional File System?
- b) Explain the Cardinality Ratios for binary relationships.
- c) Explain Logical Data Independence. **(4+3+3)**

- 3. a) Explain the three-schema architecture.
- b) Explain the network data model.
- c) Explain the following terms:
 - (i) Entity
 - (ii) Attributes
 - (iii) Value Set**(4+3+3)**

- 4. a) Who is a Database Administrator? What are the responsibilities of the DBA?
- b. What s E-R Diagram? List the various symbols used in E-R diagram.
- c) Explain DBMS Interfaces. **(4+3+3)**

UNIT – II

- 5. a) Consider the following tables:
 - STUDENT (ROLLNO, NAME, CLASS)
 - MARKS (ROLLNO, M1,M2,M3, TOTAL, PERCENT)

Write the SQL statements for the following:

- i) To compute the total and present marks of all the students.
 - ii) To list the Rollno, name of all students in the ascending order of name.
 - iii) To list all the details of a student who scored maximum total.
- b) Explain any four types of select statements.
- c) Write a note on CHECK constraint. **(4+4+2)**
6. a) Explain the different data types available in ORACLE.
- b) What is FOREIGN KEY constraint? Explain with example.
- c) Explain equi join and self join. **(4+2+4)**
7. a) With suitable example, explain the different forms of alter table statements.
- b) Name the operator used for Range Searching. Explain its usage with an example.
- c) Explain the following SQL commands with syntax and example.
- i) UPDATE
 - ii) DELETE
 - iii) DROP TABLE **(4+3+3)**

UNIT – III

8. a) What is cursor? Explain with syntax & example, the statements used for manipulating the data using cursor.
- b) Explain the usage of COMMIT & ROLLBACK in ORACLE.
- c) Explain the advantages of using trigger. **(4+2+4)**
9. a) What is Trigger? Explain the different types of trigger.
- b) Explain the various concurrency issues.
- c) Explain GRANT & REVOKE statements with syntax & example. **(4+3+3)**
10. a) Explain the various implicit cursor attributes.
- b) Consider the table
 EMP (ENO, NAME, DEPARTMENT, SALARY). Write triggering statement which would fired before the salary is updated and the row is deleted from the table. The

updated/deleted row should be stored in a new table EMP-BACKUP with same columns as the EMP table.

- c) What do you mean by locks? Explain the different types. (4+4+2)

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CREDIT BASED FIFTH SEMESTER B.Sc. DEGREE EXAMINATION OCTOBER 2013
COMPUTER SCIENCE
PAPER VI – Operating System and Linux

Time: 3 Hrs

Max. Marks: 80

PART – A

1. Answer any TEN questions from the following: 10x2=20

- m) Define deadlock.
- n) What is spooling?
- o) What is the major problem on priority scheduling?
- p) Give a real life example for deadlock.
- q) Mention the methods for handling deadlock.
- r) What is file allocation table (FAT)?
- s) Differentiate between paging and segmentation.
- t) Explain *ls* command in Linux.
- u) What is the meaning of CPU burst and I/O burst?
- v) Give the syntax and example of *mkdir* command.
- w) Explain logical operators in Linux.
- x) Write a note on *who am i* command.

PART – B

Answer any TWO questions from each unit.

UNIT – I

2. a) Explain time sharing system and multi programmed batch system.

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CREDIT BASED FIFTH SEMESTER B.Sc. DEGREE EXAMINATION OCTOBER 2015

COMPUTER SCIENCE

PAPER VI – RELATIONAL DATABASE MANAGEMENT SYSTEMS AND ORACLE

Time: 3 Hrs

Max. Marks: 80

PART – A

1. Answer any TEN questions from the following:

10x2=20

- y) What is meant by instance of database?
- z) What is data model?
- aa) What is weak entity type?
- bb) Mention any two data structures implemented by storage manager.
- cc) What is the purpose of ORDER BY clause?
- dd) Expand DDL and DML.
- ee) What is table level constraint?
- ff) Give the purpose of 'Like' operator.
- gg) What is JOIN operation?
- hh) Why check integrity constraint is used?
- ii) What are procedures?
- jj) What is the use of cursor?

PART – B

Answer any TWO questions from each unit.

UNIT – I

- 2. a) What are the disadvantages of traditional file processing system? Explain.
- b) Explain the three levels of data abstraction.

(5+5)

- 3. a) Describe the various types of database system users.

- b) Explain the components of Query Processor.
 - c) How the composite attributes differ from simple attributes. Give example. **(4+3+3)**
4. a) Explain Rolenames and recursive relationship with example.
- b) Write a note on Participation Constraints.
 - c) Give the usage of any Eight notations used in an E-R diagram. **(3+3+4)**

UNIT – II

5. a) Explain the various data types used in ORACLE with example.
- b) Differentiate the following commands.
 - i) DELETE and DROP TABLE
 - ii) UPDATE and ALTER TABLE
 - c) What is foreign key? Explain the concept with example. **(5+2+3)**
6. a) Write the commands to create the following tables with given fields.
- EMPLOYEE with fields EMPNO, ENAME, DEPTNO, DESIGNATION and SALARY.
 - DEPT with fields DEPTNO and DNAME
- Select the suitable field structure. Consider the following constraints.
- DEPTNO can be 10, 20 or 30
 - DEPTNO of any employee in EMPLOYEE table should exist in DEPT table.
- Write SQL commands for the following.
- i) List the Employee name, Designation, department no. and salary of those employees working for deptno. 10 and 30, in the ascending order of salary
 - ii) List EmpNo, Ename, department name and salary of those employees earning more than 5000
 - iii) Increment the salary of the employees in department no. 20 by 5.75% **(10)**
7. a) Give the general syntax of conditional control statement used in PL/SQL. Explain it with example.
- b) Write a PL/SQL program to display Fibonacci sequence.
 - c) What are the advantages of using ‘% type’ attribute to declare a variable in PL/SQL code? **(3+5+2)**

UNIT – III

8. a) Describe the steps involved in a PL/SQL code that uses explicit cursor. Also explain the various statements used in detail with example. **(10)**

9. a) Explain any four advantages of Procedures.
e) Explain the general syntax for creating functions in ORACLE in detail. **(4+6)**
10. a) Write a note on parameterized cursor.
b) Explain the various types of triggers with example.
c) Differentiate database triggers and procedures. **(3+5+2)**
