

**BACHELOR OF COMPUTER APPLICATIONS (Pre-revised)
(BCA)**

**Term-End Practical Examination
June, 2014**

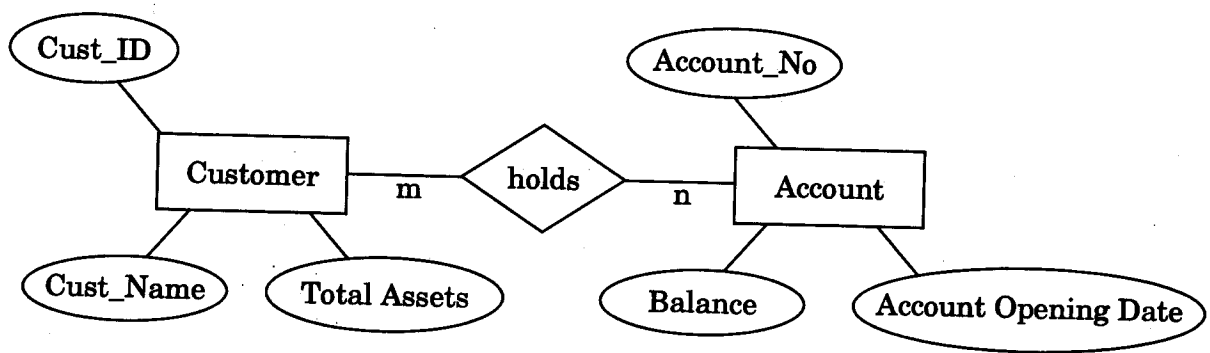
CS-67(P)/S1 : RDBMS LAB

Time : 2 Hours

Maximum Marks : 75
(Weightage 15%)

- Note :**
- (i) There is **one compulsory** question in this paper carrying 50 marks. Rest 25 marks are for viva-voce.
 - (ii) You may use any RDBMS for implementation.
 - (iii) Make and state suitable assumptions, if any.

1. A database system is to be designed to keep track of various bank accounts held by various customers. The following E-R diagram depicts it :



Please note that a customer can have many accounts; also one account may be held by more than one customer.

Perform the following tasks for the E-R diagram given above :

- (a) Design and implement normalized relations/tables for the given E-R diagram. You must include primary key, validation checks and referential integrity constraints in relations/tables. 20
- (b) Enter about 5 – 6 sets of meaningful data in each table. 10

(c) Design and implement the following queries/reports/forms for the database created by you : 20

- (i) Create two forms – one for entering customer information and second for entering account related information.
- (ii) Find the list of those customers, whose total assets are more than ₹ 10,000.
- (iii) List all those accounts which are opened in the last one year.
- (iv) List the Cust_ID, Cust_name, Account_No and Balance for all the accounts.
- (v) Find the list of customers who have more than one account.

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Term-End Practical Examination

June, 2014

00044

CS-67(P)/S2 : RDBMS LAB

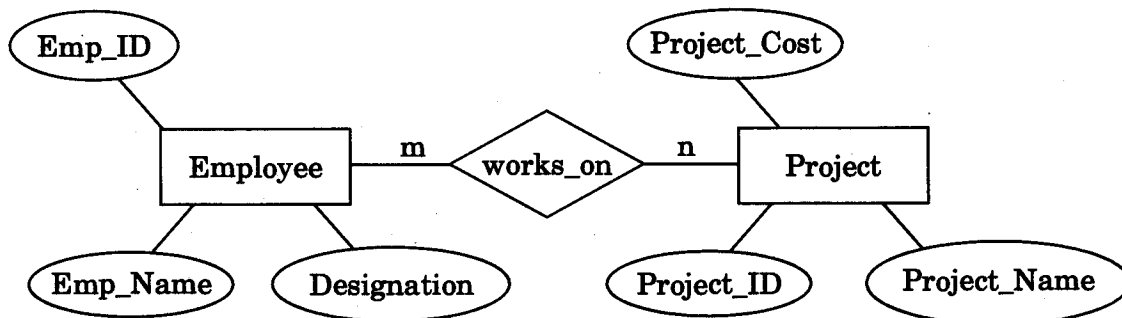
Time : 2 Hours

Maximum Marks : 75

(Weightage 15%)

- Note :**
- (i) *There is one compulsory question in this paper carrying 50 marks. Rest 25 marks are for viva-voce.*
 - (ii) *You may use any RDBMS for implementation.*
 - (iii) *Make and state suitable assumptions, if any.*

1. A database system is to be designed to keep track of projects and employees working on those projects.



An employee can work on more than one project and one project may have many employees working on it.

Perform the following tasks for the given E-R diagram :

- (a) Design and implement normalized relations/tables for the E-R diagram. You should include primary key, validation checks and referential integrity constraints in your implementation. 20
- (b) Enter about 5 – 6 sets of meaningful data in each table. 10

(c) Design and implement the following forms/queries/reports for the database system :

20

- (i) Create two forms – one for employee data and one for project information.
- (ii) List all the employees whose designation is “Software Engineer”.
- (iii) List the project details in decreasing order of project cost.
- (iv) List Emp_ID, Emp_Name, Project_ID, Project_Name for all the projects. You must use join operator to get this information.
- (v) List the Emp_ID of those employees who are working on more than one project.

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Term-End Practical Examination

00788

June, 2014

CS-67(P)/S3 : RDBMS LAB

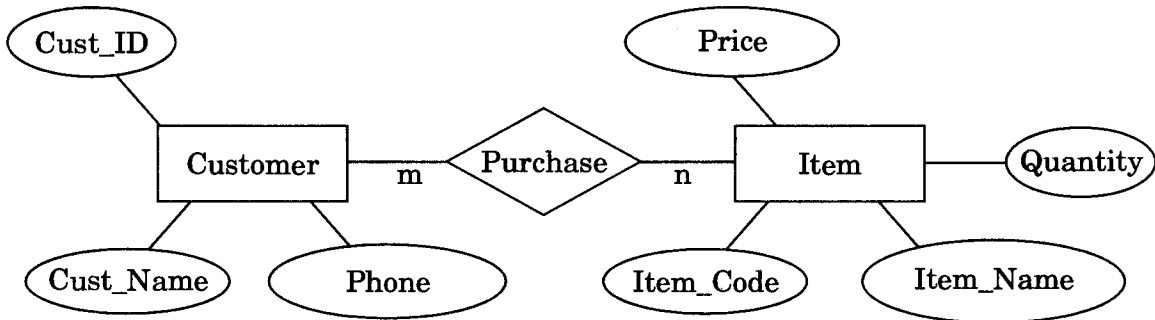
Time : 2 Hours

Maximum Marks : 75

(Weightage 15%)

- Note :**
- (i) There is **one compulsory** question in this paper carrying 50 marks. Rest 25 marks are for viva-voce.
 - (ii) You may use any RDBMS for implementation.
 - (iii) Make and state suitable assumptions, if any.

1. A departmental store keeps track of its customers and items purchased by them. The following E-R diagram shows this :



An item has a unique code. For example, Butter of a specific company and weight will be given one item code. Several of such items will be available in the departmental store. This data for each item is stored in quantity field. The relationship, therefore is many-to-many.

Perform the following tasks for the E-R diagram :

- (a) Design and implement the normalized relations/tables for the proposed database system. You must include primary key, validation checks and referential integrity constraints in your implementation. 20
- (b) Enter about 5 – 6 sets of meaningful data in each table. 10

(c) Design and implement the following forms/reports/queries for the database system :

20

- (i) Enter two forms – one each for customer and item.
- (ii) List all the items whose quantity is more than 10.
- (iii) List the name of the customers in the alphabetic order of their names.
- (iv) List the Cust_ID, Cust_Name, Item_Code, Item_Name for all the customer purchases. You must use join operation for displaying this information.
- (v) List the Cust_ID of the customers who have purchased more than one item.

BACHELOR OF COMPUTER APPLICATIONS (Pre-revised)

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00424

Term-End Practical Examination

June, 2014

CS-67(P)/S4 : RDBMS LAB

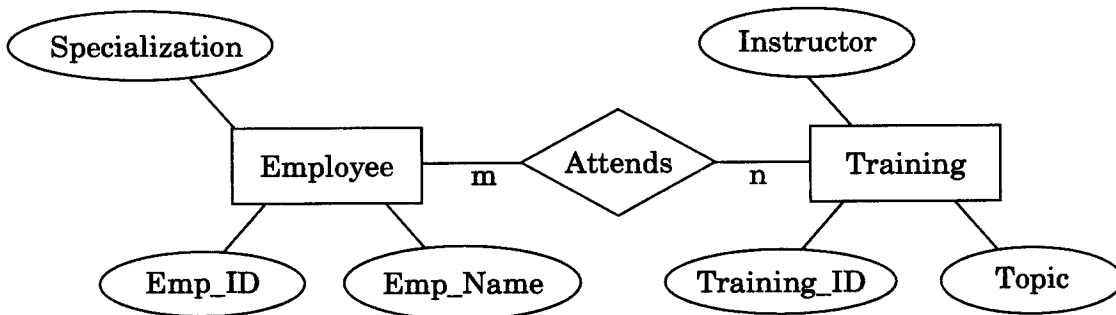
Time : 2 Hours

Maximum Marks : 75

(Weightage 15%)

- Note :**
- (i) *There is **one compulsory** question in this paper carrying 50 marks. Rest 25 marks are for viva-voce.*
 - (ii) *You may use any RDBMS for implementation.*
 - (iii) *Make and state suitable assumptions, if any.*

1. A database system is to be designed to keep track of training programmes attended by employees of an organization. This is shown in the following E-R diagram :



An employee may attend many programmes; also a training programme may be attended by many employees.

Perform the following tasks for the E-R diagram :

- (a) Design and implement normalized relations/tables for the given E-R diagram. You must include primary key, validation checks and referential integrity constraints in the relations/tables. 20
- (b) Enter about 5 – 6 sets of meaningful data in each table. 10

(c) Design and implement the following queries/reports/forms for the database created by you :

20

- (i) Create two forms – one each for customer and training information.
- (ii) List the names of all the instructors (Duplicate names should not be shown).
- (iii) List all the details of employees who have specialization as “Database Designer”.
- (iv) List the Training_ID of all those training programmes which are attended by less than 3 employees.
- (v) Display the Emp_ID, Emp_Name, Training_ID and Topic for all the employees. You should use join operation for the above.