

BACHELOR OF COMPUTER APPLICATIONS (BCA) (Pre-Revised)

Term-End Practical Examination 00546

June, 2016

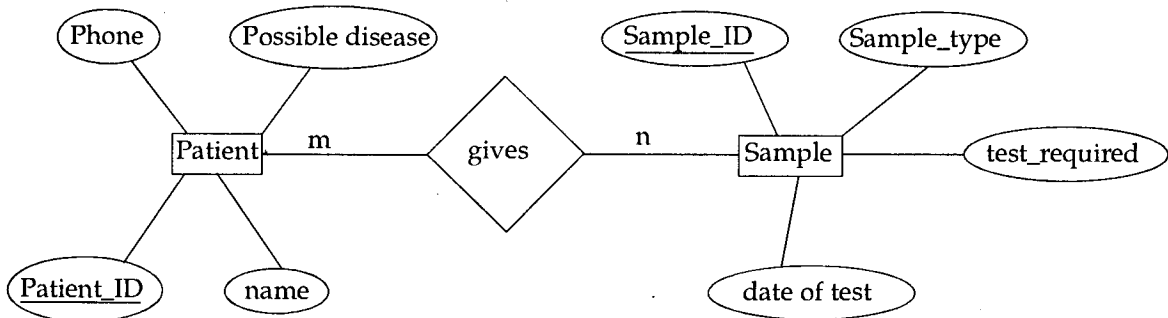
CS-67 (P) - Set - 2 : RDBMS LAB

Time : 2 hours

Maximum Marks : 75

- Note :** (i) . In this paper there is one compulsory question 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 for a medical diagnostic lab. The following E-R diagram shows this :



A sample is given by only one patient, however, many samples can be given by one patient for different test. Sample type may be assumed to be "blood", "urine" or "tissue".

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

- (a) Design and implement normalised relations/tables for the E-R diagram. You should include primary key, validation checks and referential integrity constraints in your implementation. 20
- (b) Enter 5-6 sets of meaningful data in every table that you have created in part (a). 10

- (c) Design and implement the following forms/queries/reports for the database system created as above : 20
- (i) Create two forms one for entering patient information and other for entering sample information.
 - (ii) List the name of all the patients whose telephone number is "2225556785".
 - (iii) List the Patient_ID, name and test_required for all the patients whose sample_type is "blood".
 - (iv) Create a datawise reports of samples received. It should include date of test, Sample_ID and test_required fields.
 - (v) List the "Possible diseases" due to which tests are required. The list should not have duplicate values.
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