



NORTH SOUTH UNIVERSITY
CSE 311 Database Management Systems

Department of ECE

Instructor: Dr. Kamruddin Nur

Final Exam (30%), Time: 90 Min., Summer 2020, SET: B

Student ID: _____ Name: _____ Section: _____

Instructions:

- Answer all questions. 75 minutes for answering questions and 15 minutes for scanning and uploading.

1. Answer the questions considering the following scenario -

“Best-East University is currently in need of a software system for course registration. The university has more than one department and each department has many courses of a particular program such as the Bachelor and Masters program. A student may register (enroll) all or subset of offered courses for a trimester (e.g. Spring, Summer, Fall). During the registration period, a student’s registration is authorized (signed) by the batch advisor. A batch advisor is a faculty member assigned to the batch. Once the registration date is over, a student may late register courses with a late registration fee. In the case of late registration, a student requires the signature of both the batch advisor as well as the department chairman’s authorization. ”

- (a) Identify **entities** and essential **attributes** of entities.
- (b) **Populate** realistic test data into table/s.
- (c) **Normalize** the database upto **3rd Normal Form**.

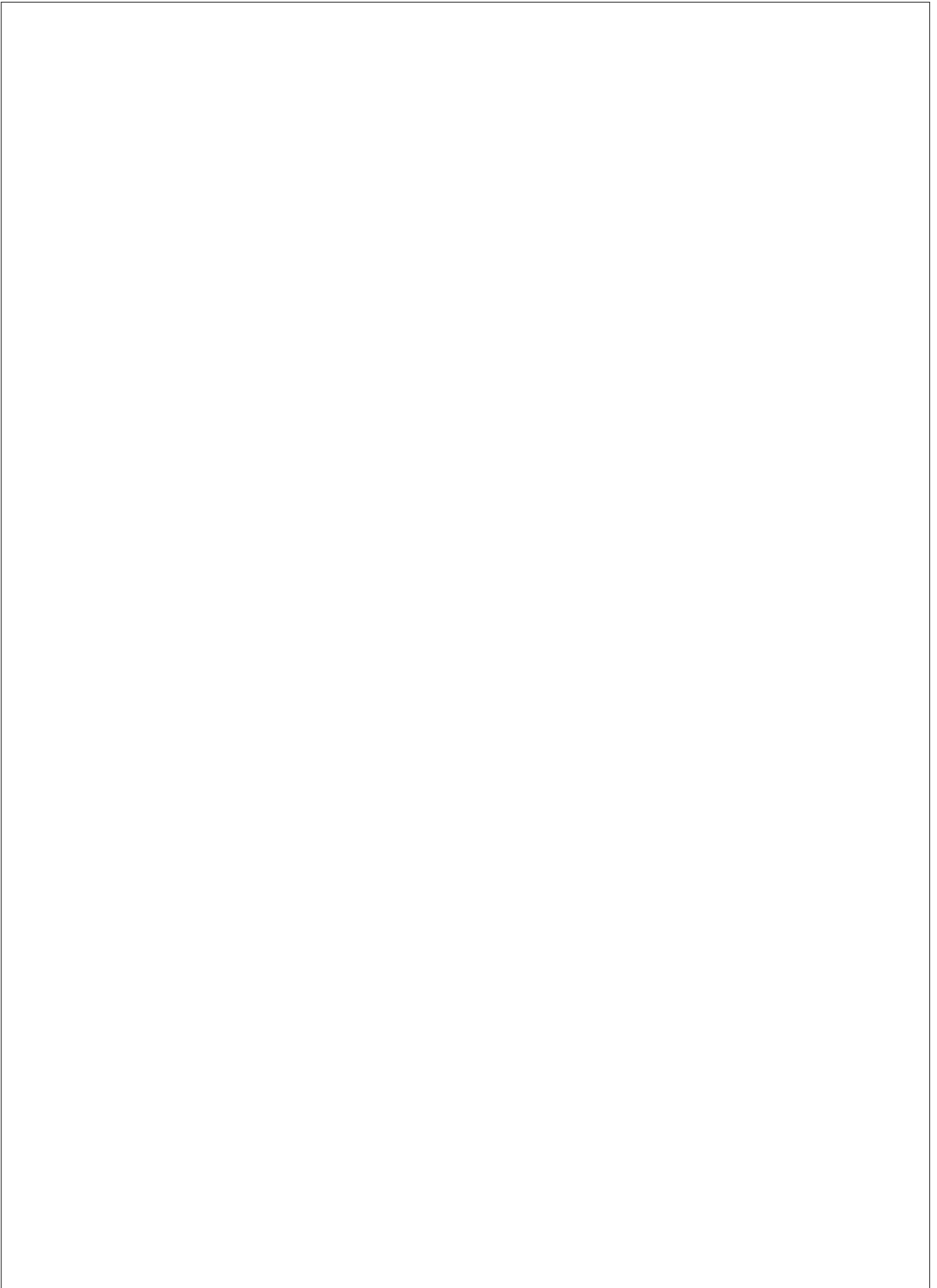
[2]

[2]

[6]

(Note: You are allowed to have necessary assumptions.)

Answer:

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2. (a) Discuss the issues of Relational Database Scaling.

[5]

Answer:

(b) Briefly, discuss different types of NoSQL databases.

[5]

Answer:

3. Compare Data Administrator and Database Administrator functions.

[10]

Answer:

-: Good Luck! :-