Question 1

* 5 applications of the entity type rule

CREATE TABLE Institution (…, PRIMARY KEY (InstId))

CREATE TABLE Student (…, PRIMARY KEY (StdNo))

CREATE TABLE Lender (…, PRIMARY KEY (LenderNo))

CREATE TABLE Loan (…, PRIMARY KEY (LoanNo),

FOREIGN KEY (InstId) REFERENCES Institution, CONSTRAINT Institution NOT NULL,

FOREIGN KEY (StdNo) REFERENCES Student, CONSTRAINT Student NOT NULL,

FOREIGN KEY (LenderNo) REFERENCES Lender, CONSTRAINT Lender NOT NULL)

CREATE TABLE DisburseLine (…, PRIMARY KEY (DateSent),

FOREIGN KEY (LoanNo) REFERENCES Loan, CONSTRAINT Loan NOT NULL)

Question 2

* 4 applications of 1-M relationship rule

Added 3 foreign keys, with not null constraints to the Loan table

Question 3

There are no M-N relationships in the table in figure 1

Question 4

* 1 application of identifying relationship rule

Added 1 foreign key, with not null constraint to the Disburse table

Question 5

* 1 application of the entity type rule
* 1 application of 1-M relationship rule

CREATE TABLE Account (…, PRIMARY KEY (AcctId))

Question 6

* 3 applications of the entity type rule
* 2 applications of 1-M relationship rule
* 2 applications of identifying relationship rule

CREATE TABLE Owner (…, PRIMARY KEY (OwnId))

CREATE TABLE Shares (…, PRIMARY KEY (OwnId, PropId),

FOREIGN KEY (OwnId) REFERENCES Owner,

FOREIGN KEY (PropId) REFERENCES Property)

CREATE TABLE Property (…, PRIMARY KEY (PropId))