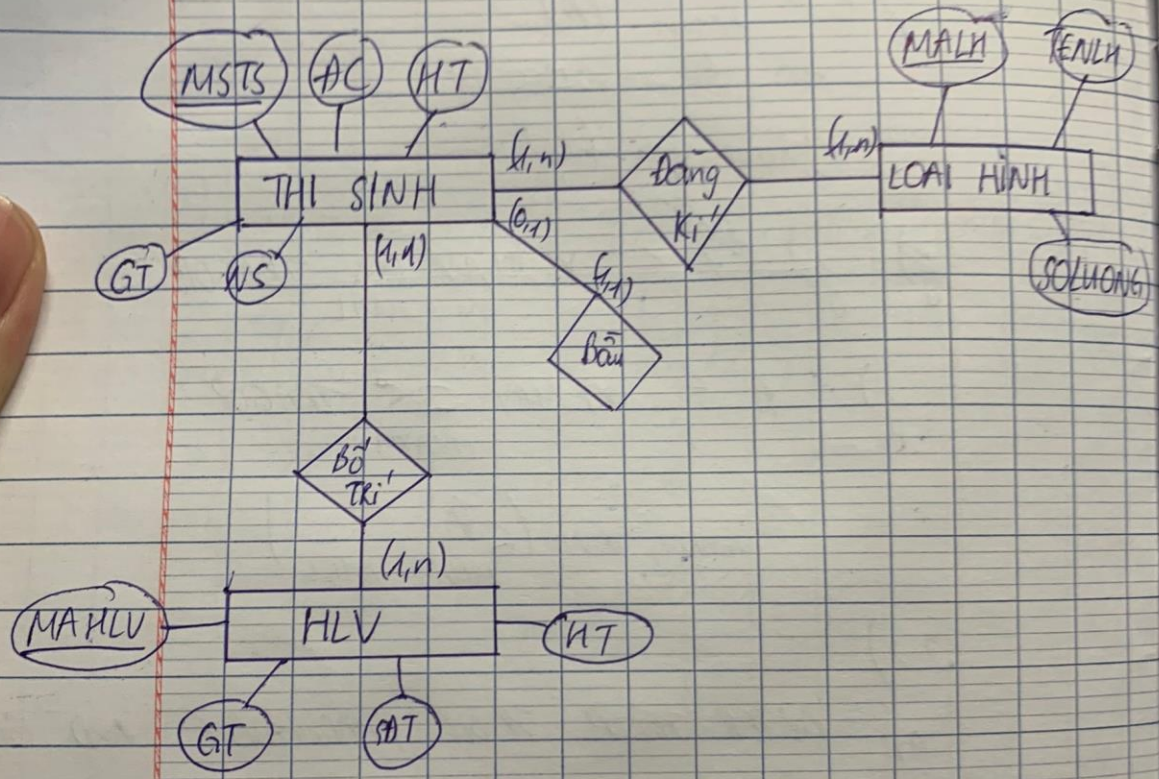
Đề 1

Câu 1:



THISINH (MSTS, DC, HT, GT, NS, MAHLV)

HLV (MAHLV, GT, SĐT, HT)

LOAIHINH (MALH, TENLH, SOLUONG)

DANGKY (MSTS, MALH)

Câu 2: a. 1)

a) $\Pi_{MALH, TENLH}\left(\sigma_{KYHAN>3 \wedge LAISUAT>2}^{(LOAIHINHTG)}\right)$

b) $\Pi_{MAXM, TENXM}\left(\sigma_{((NAMSX>=2015 \wedge NAMSX<=2020) \wedge (CONGNGHE='V-twin'))}(XEMAY \overset{MALX}{\bowtie} LOAIXE)\right)$

c) $A \leftarrow \sigma_{KYHAN>6}(LOAIHINH \overset{MALH}{\bowtie} TRAGOP)$

$R_2 \leftarrow A \overset{MAKH}{\bowtie} KHACHHANG$

$\Pi_{MALH, TENLH, TENKH}(R_2)$

d) $R_1 \leftarrow TRAGOP \overset{MAXM}{\bowtie} XEMAY$

$R_2 \leftarrow XEMAY \overset{MALX}{\bowtie} LOAIXE$

$R_3 \leftarrow R_1 \bowtie R_2$

$R_4 \leftarrow \sigma_{NAMSX='2000' \wedge LOAIXE='Honda\ Ukava\ Alpha'}(R_3)$

$\Pi_{MAKH}(R_4)$

e) $R_1 \leftarrow TRAGOP \overset{MALH}{\bowtie} LOAIHINHTG$

$R_2 \leftarrow \sigma_{KYHAN=12}(R_1)$

~~MALH $\mathcal{F}_{COUNT}(MAKH)$ (R_2)~~

MALH $\mathcal{F}_{COUNT(MAKH)}$ (R_2)

g) $R_1 \leftarrow$ TRAGOP $\bowtie_{MAXM}$ XEMAY

$R_2 \leftarrow$ XEMAY $- R_1$

$\Pi_{MAXM, TENXM}(R_2)$

22)

a) ALTER TABLE KHACHHANG ADD GIOITINH BIT

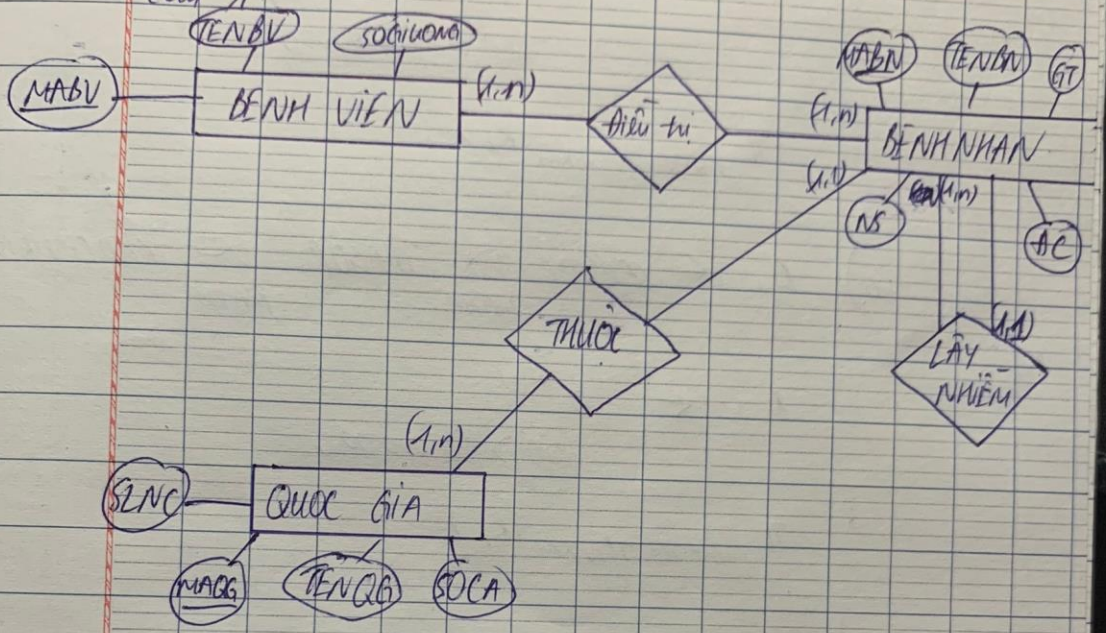
b) UPDATE XEMAY

SET GIA = GIA * 0.9

WHERE MAXM = 'ML01' AND NAMSX = 2019

ĐỀ 2

Câu 1:



BENHVIEN (MABV, TENBV, SOGIUONG)

BENHNHAN (MABN, TENBN, GT, ĐC, NS, MAQG)

QUOCGIA (~~SL~~ MAQG, TENQG, SOCA, SLNC)

DIEUTRI (MABN, MABV)

Câu 2:

2.1)

a) $\Pi_{MAXM, TENXM}\left(\sigma^{(XEMAY)}_{NAMSX = 2020 \wedge GIA > 40\,000\,000}\right)$

b) $R_1 \leftarrow XEMAY \overset{MAXM}{\bowtie} TRAGOP$

$R_2 \leftarrow \sigma^{(R_1)}_{(MONTH(NGAYMUA) = '8' \wedge YEARS(NGAYMUA = '2020'))\wedge}$

$GIA > 50000000$

$\Pi_{MAXM, TENXM}(R_2)$

c) $R_1 \leftarrow XEMAY \underset{MAXM}{\bowtie} TRAGOP \underset{MAKH}{\bowtie} KHACHHANG$

$R_2 \leftarrow \sigma^{(R_1)}$

$GIA > 50000000$

$\Pi_{MAXM, TENXM}(R_2)$

d) $R_1 \leftarrow KHACHHANG \underset{MAKH}{\bowtie} TRAGOP \underset{MAXM}{\bowtie} XEMAY \underset{MALX}{\bowtie} LOAIXE$

$R_2 \leftarrow \sigma^{(R_1)}_{NAMSX = 2019 \wedge CONGNGHE = 'V-Twin'}$

$\Pi_{MAKH}(R_2)$

e) $R_1 \leftarrow (LOAIHINHTG \bowtie TRAGOP)$

$\sigma_{PHANTRAMTT = 20}$

$R_2 \leftarrow MALH\ \mathcal{F}_{count(MAKH)}(R_1)$

$\Pi_{MALH, SLKH}(R_2)$

g) $R_1 \leftarrow$ LOAIHINHTG $\bowtie_{MALH}$ TRAGOP $\bowtie_{MAKH}$ KHACHHANG

$R_2 \leftarrow$ LOAIHINHTG $-$ R_1

Π MALH, TENLH (R_2)

22)

a) ALTER TABLE KHACHHANG
DROP COLUMN CMND

b) UPDATE LOAIHINHTG
SET CAISUAT = 1,5
WHERE TENLH = 'Tín dụng' AND KYHAN = 12