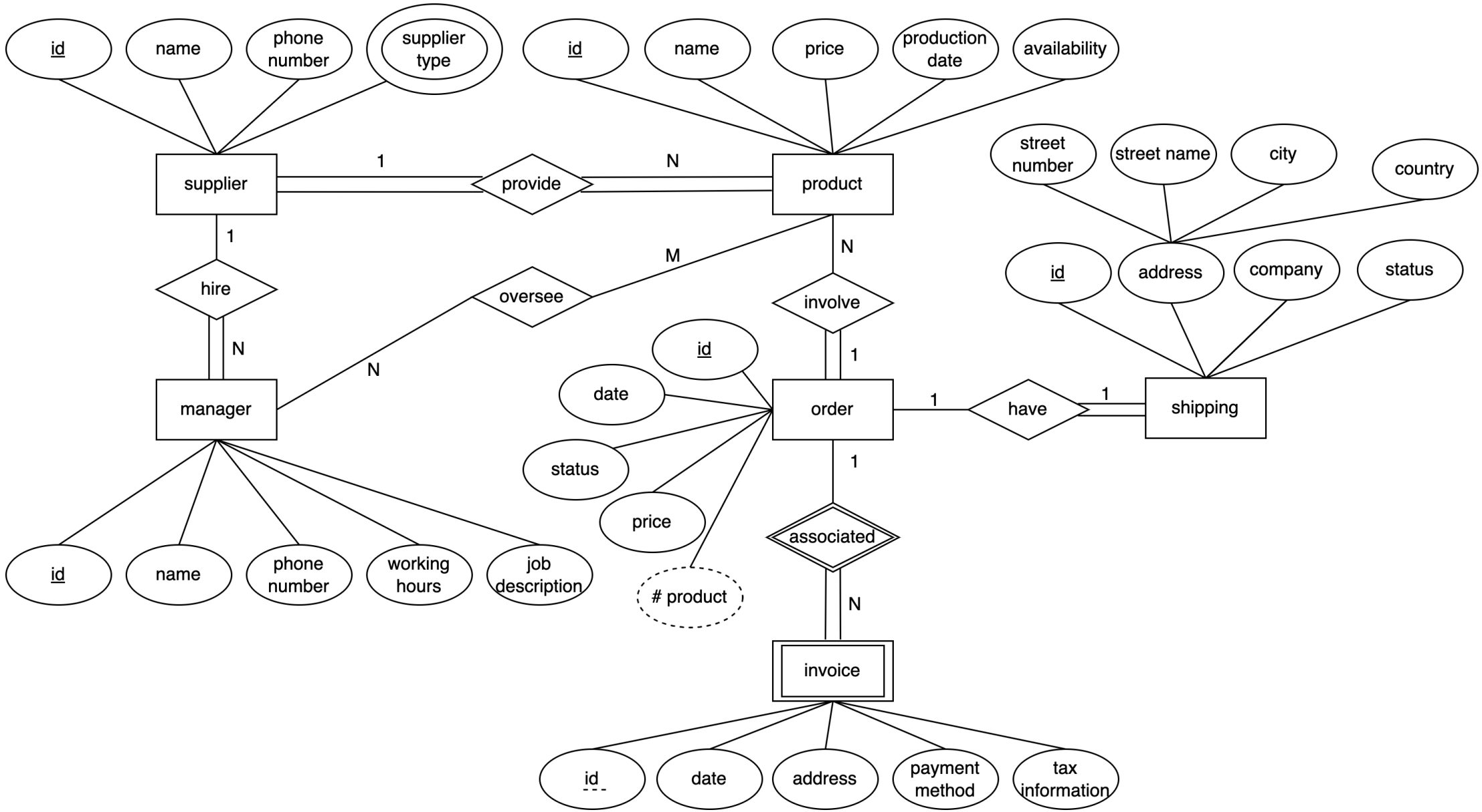
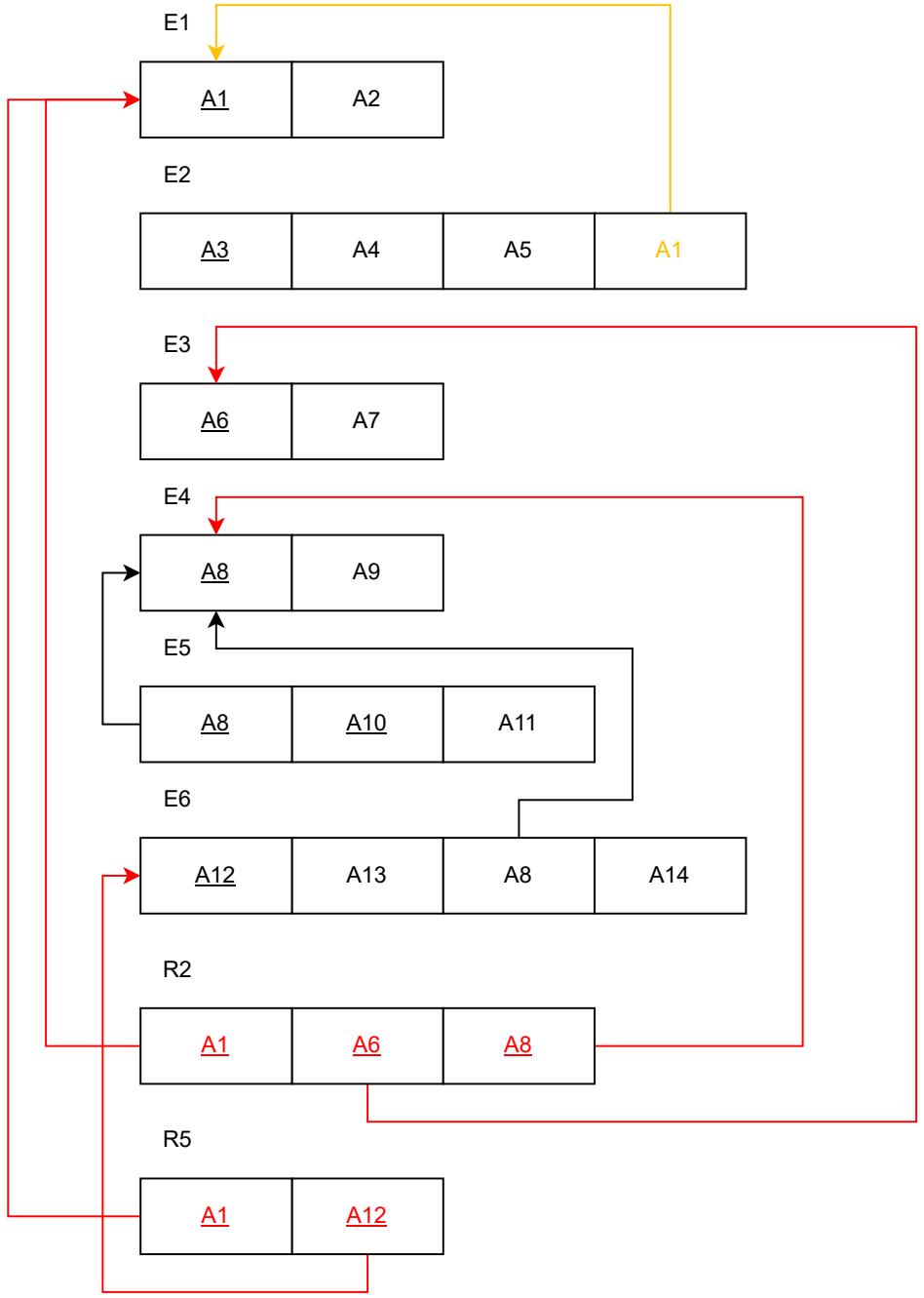
Question 1


id
name
phone number
supplier type
supplier
1
provide
N
id
name
price
production date
availability
product
street number
street name
city
country
id
address
company
status
shipping
have
1
1
order
1
1
involve
N
M
oversee
N
1
hire
N
manager
N
id
date
status
price
product
associated
N
invoice
id
name
phone number
working hours
job description
id
date
address
payment method
tax information

Question 2


E1
A1
A2
E2
A3
A4
A5
A1
E3
A6
A7
E4
A8
A9
E5
A8
A10
A11
E6
A12
A13
A8
A14
R2
A1
A6
A8
R5
A1
A12

Question 3

1. $\pi_{\{gName\}}\left(\sigma_{genre='role-playing' \text{ and } price<200}(Game \bowtie Genre)\right)$

2. $R_1 = \sigma_{duration>3 \text{ and } platform='Windows'}(Player \bowtie Play \bowtie Game)$

   $R_2 = \pi_{\{pName\}}\left(\pi_{\{pID\}}\left(\sigma_{Count(gID)>5}\left(\gamma_{pID,Count(gID)}R_1\right)\right) \bowtie Player\right)$

3. $R_1 = \pi_{\{gID\}}\left(\sigma_{genre='Adventure'}Genre\right) \cap \pi_{\{gID\}}\left(\sigma_{genre='Action'}Genre\right)$

   $R_2 = \pi_{\{gName\}}\left(\sigma_{nationality='German'}(Player \bowtie Play \bowtie R_1 \bowtie Game)\right)$

4. $R_1 = \pi_{\{pID\}}\left(\sigma_{platform='PSP'}(Player \bowtie Play \bowtie Game)\right) - \pi_{\{pID\}}\left(\sigma_{platform\neq'PSP'}(Player \bowtie Play \bowtie Game)\right)$

   $R_2 = \pi_{\{pID\}}Player - \pi_{\{pID\}}\left(\sigma_{genre='Fighting'}(Player \bowtie Play \bowtie Genre)\right)$

   $R_3 = \pi_{\{pName\}}\left((R_1 \cap R_2) \bowtie \sigma_{nationality='Italian'}Player\right)$