

Ans 7 (a) Match ( : Person ) - [ r\* ]  $\rightarrow$  ( : )  
Return r

(d) Match ( B<sub>1</sub> : Book )  $\rightarrow$  [ : Uses\* ]  $\rightarrow$  [ B<sub>2</sub> : Book )  
Where B<sub>1</sub>. price  $\geq 50$   
Return B<sub>2</sub>

(e) Match ( S : Student ) - [ : Buys ]  $\rightarrow$  ( b : Book ),  
S - [ : takes ]  $\rightarrow$  ( : Major { major = 'CS' } ),  
S - [ : takes ]  $\rightarrow$  ( : Major { major = 'Math' } )  
Return b, count(s)

(b) Match (S: Student {name: 'John'}) -

[ : Buys ]  $\rightarrow$  (book: Book)

where book.price  $\geq$  50

Return S

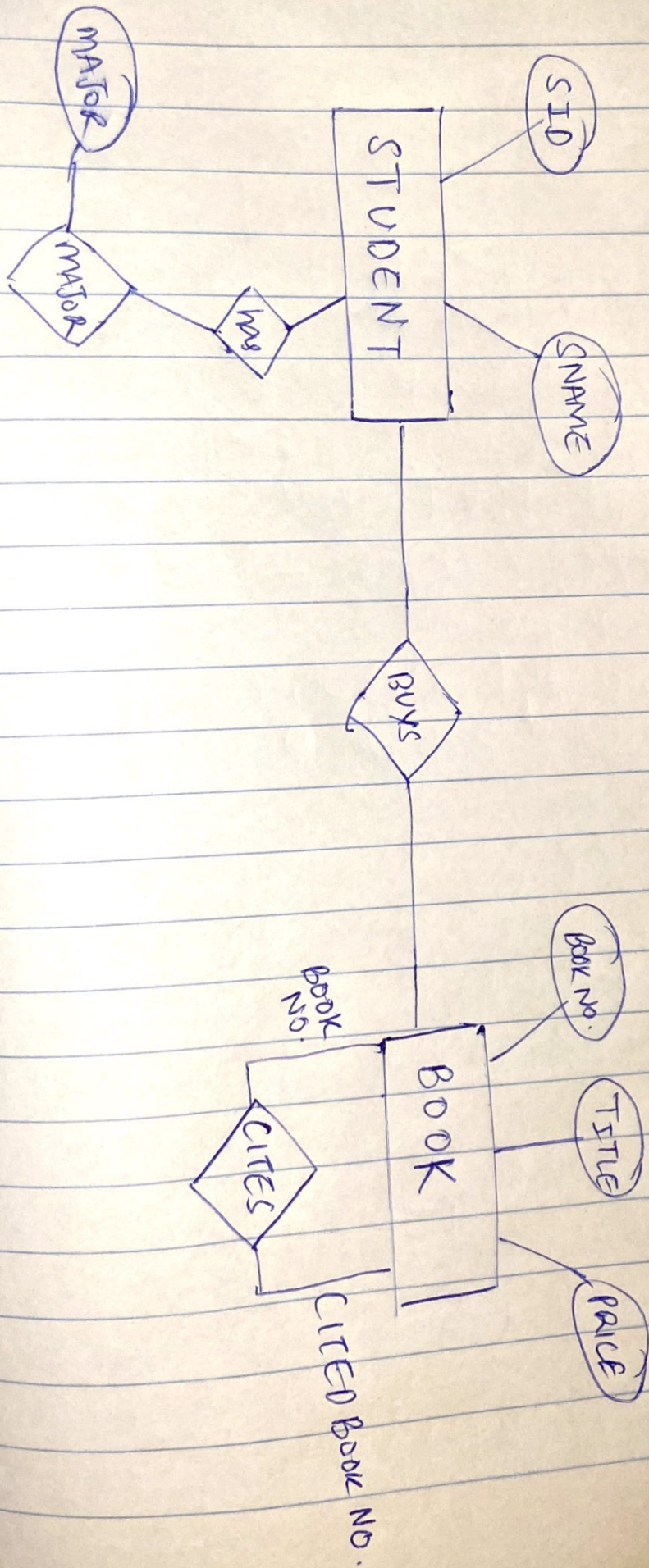
(c) Match (S: Student) - [ : Buys ]  $\rightarrow$  (b: Book),  
(b: Book) - [C: Cites]  $\rightarrow$  ( : Book)

where C.citedbookno  $\geq$  50

Return S ;



Ans (6a)





Ans & b)

