



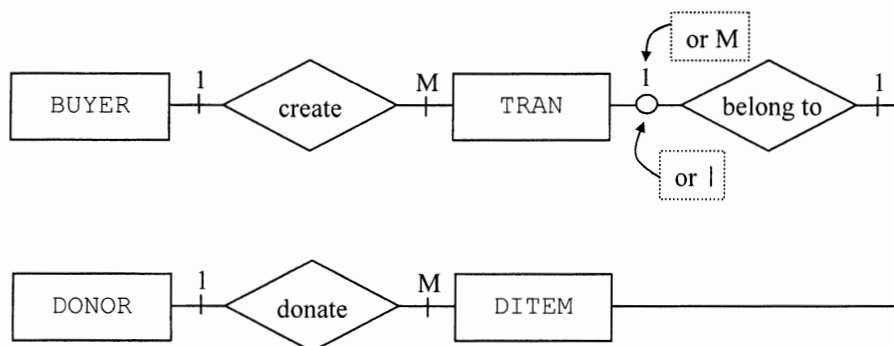
		<b>Marks</b>
3. (a)	The filtering is simpler but the efficiency is low when a large amount of data is involved.	1 1
(b)	<u>Insert into</u> PLANT (DDATE, NAME, EMAIL, AR, GYEAR, TYPE, AMOUNT) Values ('20/03/2013', 'Lo Sam', 'slo@hkcdcity.net', '127', '2001', 'A', 888)	1 1 1
(c) (i)	56	2
(ii)	It requires less storage size as each integer could occupy less than 3 bytes, the size of AREA.	1
(iii)	It is very difficult to validate the data such as having '1's in the number.	1
(d) (i)	system requirements specification deliverables	1 1
(ii)	- record purpose - maintenance in future	1 1
(iii)	Tom should conduct <u>data conversion</u> before the data migration to make sure that <u>data consistency</u> is held. (or data preparation)	1 1

4. (a) Database administrator / designer

1

(b)

6



Entity ①, ①  
 Relationship ①, ①  
 Cardinality ①, ①

(c) Advantage: Simplify the design. / A buyer could be a donor as well. (save storage) 1  
 Disadvantage: The SQL performance may be poorer as the table size is larger. / An extra field is required to distinguish between buyer and donor. / It cannot identify buyer/donor. 1

(d) (i) The bidding history of all buyers with names is shown. 1

(ii) 

```
select AMOUNT, BDATE }  
from BID  
order by bdate (or amount)
```

 1  
1

(e) 

```
SELECT MNAME FROM BUYER, BID  
WHERE BUYER.MID = BID.MID AND  
AMOUNT = (select max(AMOUNT) ①  
from BID where DID = 'D123')
```

 1  
1

or in

(f) Mary can use data mining to analysis the relation to buyers who bid items. When a buyer makes a bid, the web site can display a list of items in which the buyer may be interested. 2