[Q1: 5pts]

Answer: The schema of result relation is as follows:

B	C	A	D
4	3	6	9
5	1	3	6

[Q2: 5pts]

Answer: The schema of result relation is as follows:

A	B	C	D
10	t	8	9

[Q3: 5pts]

Answer:

Value range of t,

$t = 0 - (r*s - 1)$

t=r on R NATURALJOIN R

[Q4: 5pts]

Answer: The schema of the result relation is,

B	A
2	1
2	4
5	4
5	2

Answer:

Union:

A	B	C
a	b	c
d	b	c
d	e	f
b	e	c
a	b	f
b	e	d

Intersection:

A	B	C
a	b	c
d	e	f
b	e	c

R-S:

A	B	C
d	c	c
a	b	f

S-R:

A	B	C
b	e	d