1. 

2.1
We can use SQL to represent the changes:
Update Project set PNUMBER=99 where PNUMBER=1
Update WORKS_ON set PNO=99 where PNO=1

2.2
The following tuples are removed from the corresponding relations:
Tuples 1, 2, 5, 6 in Employee; Tuple 1 in Department; Tuple 3, 4, 5 in DEPT_LOCATION; Tuples 1 through 9 in Works_on; Tuples 1, 2, 3 in Project; Tuples 1, 2, 3, 5, 6, 7 in Dependent.

7.19
There are NO integrity constraints violated.

Reference integrity constraints violated.
The following are the different ways of enforcing these constraints:
1) reject
2) cascade by deleting referring tuples:
   delete from WORKS_ON where PNO=1
3) change values to a existing PNO (such as 2):
   update WORKS_ON set PNO=2 where PNO=1

Reference integrity constraints violated.
The following are the different ways of enforcing these constraints:
1) reject
2) change referenced tuple
   Here we can add a new EMPLOYEE tuple whose SSN is 943775543
3) change referencing tuple
   Here we can UPDATE the SUPERSSN (the EMPLOYEE tuple whose SSN is 999887777) to a
   EXISTING EMPLOYEE’s SSN (Such as 123456789)

There are NO integrity constraint violated.