

5)

a)

i)

```
SELECT r.Ringname, AVG(w.Alter)
FROM Ring r, Wesen w, RingtraegerIn rt
WHERE rt.Ring = r.Ringname
      AND rt.RNr = w.WNr
GROUP BY (r.Ringname);
```

ii)

```
SELECT r.Ringname, r.Kraft, w.Alter
FROM Ring r, Wesen w, RingtraegerIn rt,
WHERE rt.Ring=r.Ringname
      AND rt.RNr=w.WNr
      AND r.Ringname NOT IN(
          SELECT r2.Ringname
          FROM Ring r2, Ort o, RingtraegerIn rt, Wesen w,
          WHERE rt.Ring=r2.Ringname
                AND rt.RNr=w.WNr
                AND w.Volk="Zwerg"
                AND o.BuergermeisterIn=w.WNr
      );
```

iii)

```
SELECT g.GNr, g.Gruppenname
FROM Gruppierung g, Wesen w,
WHERE g.AnfueherIn=w.WNr
      AND w.Volk = (SELECT w2.Volk
                     FROM Wesen w2
                     WHERE w2.Vorname = 'Gimli'
                     AND w2.Nachname = 'Elbenfreund')
ORDER BY w.Nachname DESC;
```

5)

a)

iv)

```
SELECT o.ONr, o.Ortsname, o.Anzahleinwohner
FROM Ort o
WHERE o.Anzahleinwohner >= 5000
AND o.AnzahlEinwohner <= 25000
AND (SELECT MAX(w.Alter)
      FROM Wesen w, HatBesucht hb, Ort o2
      WHERE hb.BesucherIn=w.WNr
      AND hb.Ort=o2.ONr
      AND o2.ONr=o.ONr
     ) > 15;
```

b)

```
SELECT DISTINCT o.ONr, o.Ortsname
FROM Ort o, HatBesucht hb, Wesen w
OUTER JOIN RingTraeger ON RingTraeger.RNr=hb.Besucher
OUTER JOIN Grupperung ON Gruppierung.AnfuehrerIn=hb.Besucher
WHERE o.ONr=hb.Ort
AND RingTraeger.RNr=w.WNr
AND w.WNr=hb.Besucher
AND (w.Volk = "Elben" OR w.Volk = "Menschen");
```