1. unify[t(s(s), G, s, p, t(K), s), t(s(G), G, s, p, t(K), U)]

initially: s = {} , A= t(s(s), G, s, p, t(K), s) , B= t(s(G), G, s, p, t(K), U).

1. s = s ° {G=s} = {G=s}  
   A°s= t(s(s), s, s, p, t(K), s)  
   B°s= t(s(s), s, s, p, t(K), U)
2. s = s ° {U=s} = {G=s, U=s}

A°s= t(s(s), s, s, p, t(K), s)  
B°s= t(s(s), s, s, p, t(K), s)

Answer: s = {G=s, U=s}

1. unify[g(l, M, g, G, U, g, v(M)), g(l, v(U), g, v(M), v(G), g, v(M))]

initially: s = {} , A= g(l, M, g, G, U, g, v(M)), B=g(l, v(U), g, v(M), v(G), g, v(M)).

1. s = s ° {M=v(U)} = {M=v(U)}  
   A°s= g(l, v(U), g, G, U, g, v(v(U))).   
   B°s = g(l, v(U), g, v(v(U)), v(G), g, v(v(U))).
2. s = s ° {G=v(v(U))} = {M=v(U), G=v(v(U))}

A°s= g(l, v(U), g, v(v(U)), U, g, v(v(U))).   
B°s = g(l, v(U), g, v(v(U)), v(v(v(U))), g, v(v(U))

1. s = s ° {U= v(v(v(U)))} => circular occurrence – illegal substitution.

Answer: No such substitution.

1. unify[m(M, N), n(M, N)]

Answer: There isn't a unifier for 2 different predicates m and n.

4. unify[p([v | [V | VV]]), p([[v | V] | VV])]

Initially: s = {}, A = p([v | [V | VV]]), B= p([[v | V] | VV]).

1. s = s ° {v = [v|V]} => recursive definition

Answer: No such substitution.

5. unify[g([T]), g(T)]

Initially: s = {}, A = g([T]), B= g(T).

1. s = s ° {T = [T]} => circular occurrence

Answer: No such substitution.