case II, if atleast one of the inputs is LOW

0.9

min voltage for both diodes and transistor to be conducting:

1.7

transistor is in cut off mode

if the load gates are connected, the input diodes of the load gates are non conducting, which means the reverse saturation current of these diodes mu

st be supplied through the collector resistor R(c), which will produce a voltage drop across R(c) and consequently the output voltage correspond

ing to HIGH state will be a little less than V(cc). The maximum current which can be supplied by the gate will depend upon V(OH). The fan out is

determined on the basis of maximum current.