UM-SJTU JI Summer 2020 VE 320 Quiz 6

Student ID:

Name:

1. For a p type semiconductor in contact with a metal, when does it form a Schottky contact, and when does it form an Ohmic contact? Please draw the energy band diagram for each case, and explain using your own words.

2. When we forward bias and reverse bias a Schottky junction, what makes the current different? Please draw the energy band diagram and explain.