

# Physics

## Section I – Part B (continued)

Marks

Question 24 (8 marks)

In terms of band structures and relative electrical resistance, describe the differences between a conductor, an insulator and a semiconductor.

8

A conductor is a device which transport free moving electrons. Such as copper, & aluminium  
An Insulator is a device which can not conduct any electrons. Rubber plastics and glass are examples of this.

A semiconductor is a device which conducts the movement of free electrons but also has resistance in it.