

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.

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A conductor conducts electricity ~~and is~~
~~cheap~~, an insulator does not conduct
electricity. A semiconductor can allow
electricity to run through it, but conditions
can change by doping, or change in
temperature.

Conductors cannot be controlled, nor
can insulators to conduct electricity or
not. But semiconductors can.

Semiconductors' ~~can also~~ conductivity
can be regulated.