

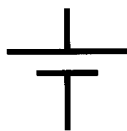
APPENDIX I

Electrical Symbols

The symbols below are the ones which will be used in Science and Electronics examination papers. They are mainly in accord with the recommended symbols published by the Institution of Electrical Engineers at the time of printing of this specification. Further information about electrical symbols can be obtained from the IEE website www.iee.org.uk/schools.

It is expected that candidates will be familiar with the appropriate symbols to the extent of recognising them in circuit diagrams and drawing them.

This appendix is common to science specifications with a Physics component and Electronics specifications. It should be read alongside the specification content for information as to which symbols apply, e.g. the transistor applies only to Electronics whereas the resistor applies to all specifications.



Electrical cell.
Also represents a
battery of cells.



Fuse.



Junction of
conductors.



Heating element.



Resistor.



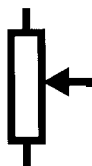
Indicator lamp.



Variable
resistor.



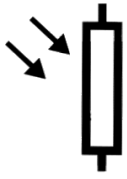
Filament lamp.



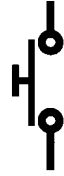
Potentiometer.



Switch.



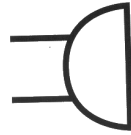
Light dependent resistor.



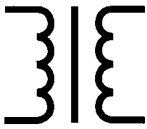
Push to make switch.



Thermistor.



Buzzer.



Transformer.



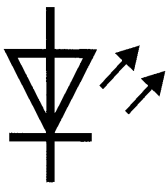
Earth.



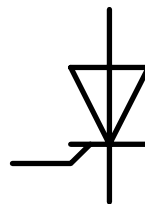
Diode.



Operational amplifier.



Light emitting diode.



Thyristor.

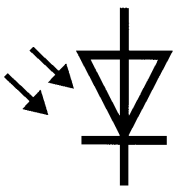
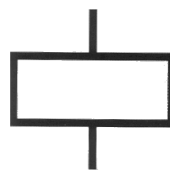


Photo diode.



Relay coil.



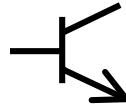
Generator.



Ammeter.



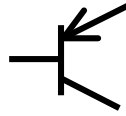
Voltmeter.



NPN transistor.



Motor.



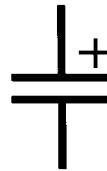
PNP transistor



Capacitor.



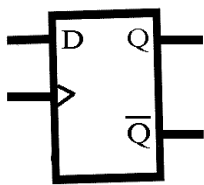
Variable capacitor.



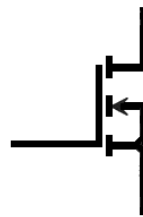
Polarised capacitor.



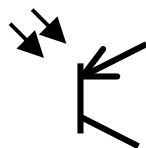
Inductor.



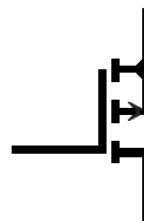
D-type
flip-flop.



MOSFET
n-channel

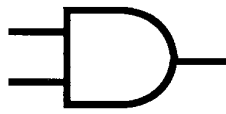


PNP phototransistor

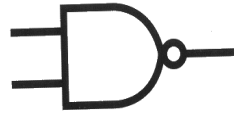


MOSFET
p-channel

Logic Gates



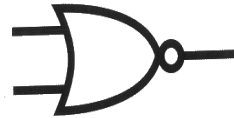
AND.



NAND.



OR.



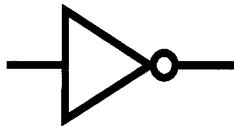
NOR.



Exclusive OR
(XOR).



Exclusive NOR
(XNOR)



NOT.