

ALL UNITS

No.	CONTENT
0.1.	I know the units for all of the physical quantities used in this course.
0.1.1	Give the units and symbols for the following quantities i) Voltage ii) Current iii) Time iv) Resistance v) Power vi) Energy vii) Force viii) Frequency ix) Gravitational Field Strength x) Mass xi) Temperature xii) Weight xiii) Wavelength
0.2.	I can use the prefixes: nano (n), micro(μ), milli (m), kilo(k), Mega(M) & Giga (G)
0.2.1.	Convert the following to volts: i) 5 kV ii) 23 mV iii) 7 μ V iv) 2.8 MV v) 67 nV vi) 389 μ V
0.2.2.	Use the correct prefix to write the following in the shortest possible form: i) 8000000 J ii) 0.000004 J iii) 6340 J iv) 0.005 J v) 0.000063 J vi) 9806000 J
0.2.3.	Change the following to basic units: i) 50 km ii) 30000 km iii) 57 mm iv) 9 cm v) 8.31 km vi) 25 km 356 m 28 cm vii) 5 mm viii) 3 h ix) 2 min 40 s x) 8 min 22s xi) 7.45 mm xii) 7 h 25 min 30s xiii) 500 g xiv) 7400000 g xv) 250 mg xvi) 97.5 g xvii) 45 μ g xviii) 3700 Mg
0.2.4.	Change the following to basic units: i) 800 mA ii) 0.25 MA iii) 375 kA iv) 35.6 μ A v) 35.6 kA vii) 9 430 000 μ A viii) 750 mV ix) 4.7 MV x) 450 kV xi) 53 μ V xii) 281kV xiii) 10670000 μ V
0.2.5	Change the following to basic units: i) 56 kJ ii) 78 mJ iii) 8000 MJ iv) 0.3 μ J v) 0.0075 MJ vi) 3600 μ J
0.3.	I can give an appropriate number of significant figures when carrying out calculations

No.	CONTENT
0.3.1	Convert the following to 3 significant figures. i) 23760000 V ii) 45.6783 A iii) 0.1023 m iv) 78945379.97 Hz v) 7600043.7 m/s vi) 1254879 V vii) 67593268.0076 m viii) 1214687 A
0.4.	I can use scientific notation when large and small numbers are used in calculations.
0.4.1	Write the following in scientific notation: i) 370 000 000 ii) 20 050 000 000 iii) 930 000 000 000 000 iv) 0.000 23 v) 0.00000006 vi) 0.000 000 000 04
0.4.2	Write out the following in full: i) 3×10^8 ii) 2.75×10^4 iii) 7.004×10^9 iv) 8.4×10^{-3} v) 4.2×10^8 vi) 9.08×10^{-5}