1 Which of the following is **not** a unit of power?

A $N\ m\ s^{-1}$ ⬭

B $kg\ m^2\ s^{-3}$ ⬭

C $J\ s^{-1}$ ⬭

D $kg\ m^{-1}\ s^{-1}$ ⬭

(Total 1 mark)

2 Which of the following is **not** a unit of power?

A $N\ m\ s^{-1}$ ⬭

B $J\ s$ ⬭

C W ⬭

D $kg\ m^2\ s^{-3}$ ⬭

(Total 1 mark)

3 Which of the following is a possible unit for rate of change of momentum?

A $N\ s$

B $N\ s^{-1}$

C $kg\ ms^{-1}$

D $kg\ ms^{-2}$

(Total 1 mark)

4 Which one of the following could be a unit of gravitational potential?

A N

B J

C $N\ kg^{-1}$

D $J\ kg^{-1}$

(Total 1 mark)

5 Which one of the following **cannot** be used as a unit for electric field strength?

A $J\ m^{-1}\ C^{-1}$

B $J\ A^{-1}\ s^{-1}m^{-1}$

C $N\ A^{-1}\ s^{-1}$

D $J\ C\ m^{-1}$

(Total 1 mark)

6 Which one of the following is a possible unit of impulse?

A Ns^{-1}

B $kg\ ms^{-1}$

C $kg\ ms^{-2}$

D sN^{-1}

(Total 1 mark)

7 Which of the following gives a correct unit for $\left(\frac{g^2}{G}\right)$?

A N ⬭

B N kg^{-1} ⬭

C N m ⬭

D N m^{-2} ⬭

(Total 1 mark)

8 In which of the following do both quantities have the same unit?

A Electrical resistivity and electrical resistance. ⬭

B Work function Planck constant ⬭

C Pressure and the Young modulus. ⬭

D Acceleration and rate of change of momentum. ⬭

(Total 1 mark)

9 The fission of one nucleus of uranium 235 releases 200 MeV of energy. What is the value of this energy in J?

A 3.2×10^{-25} J

B 3.2×10^{-17} J

C 3.2×10^{-11} J

D 2.0×10^{6} J

(Total 1 mark)

10 Which line, **A** to **D**, gives correct units for both magnetic flux and magnetic flux density?

	magnetic flux	magnetic flux density
A	Wb m^{-2}	Wb
B	Wb	T
C	Wb m^{-2}	T m^{-2}
D	T m^{-2}	Wb m^{-2}

(Total 1 mark)

11 Complete the following table.

Quantity	**Vector or Scalar**	**S.I. Unit**
Displacement	Vector	m
Velocity		
Weight		
Energy		

(Total 3 marks)

12 Complete the following table by stating whether the quantity is a vector or a scalar and by giving the full name of its unit.

Quantity	**Vector or Scalar**	**S.I. Unit**
force	vector	newton
displacement		
kinetic energy		
power		

(Total 3 marks)