

SMART EXAM RESOURCES**9702 PHYSICS TOPIC QUESTIONS****TOPIC: PHYSICAL QUANTITIES AND UNITS****SUB-TOPIC: SCALARS AND VECTORS****SUB-SUB-TOPIC: DIFFERENCE BETWEEN SCALARS AND VECTORS****SET-1-QP-MS****1**

- (a) Distinguish between scalars and vectors.

.....

..... [1]

- (b) Underline **all** the vector quantities in the list below.

acceleration kinetic energy momentum wer eight [2]

MARK SCHEME:

- (a) scalar has magnitude/size, vector has magnitude/size and direction B1 [1]
- (b) acceleration, momentum, weight B2 [2]
(-1 for each addition or omission but stop at zero)

2 (i) State the difference between a scalar quantity and a vector quantity.

scalar:

.....

vector:

..... [2]

(ii) Distinguish between vector quantities and scalar quantities.

.....

.....

..... [2]

MARK SCHEME:

- (i) scalar: magnitude only
vector: magnitude and direction (*allow scalar with direction*)
(*allow 1 mark for scalar has no direction, vector has direction*)

B1
B1 [2]

- (ii) scalar quantity has magnitude (allow size)
vector quantity has magnitude and direction

B1
B1 [2]