

Name of the Student: _____

Max. Marks : 17 Marks

Time : 17 Minutes

Mark Schemes

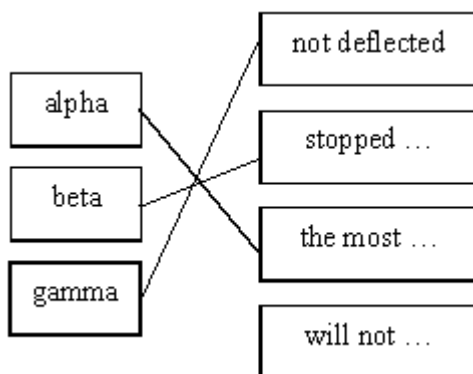
Q1.

- (a) top and bottom boxes identified 1
- (b) Medical (treatment)
or X-rays
answer must be in table
accept treatment for medical treatment 1
- (c) 15
allow 1 mark for correctly identifying 300 as the average dose 2

[4]

Q2.

- (a) 3 lines correctly drawn



1 mark for each correct line if more than one line is drawn from a box in List A all lines from that box are wrong

3

- (b) nucleus
accept nuclei
*do **not** accept nuclear* 1
- (c) Y
*do **not** accept gamma*

any **two** from:

*do **not** accept other properties of gamma*

- least dangerous (inside the body)
*do **not** accept not dangerous*
accept not as harmful as alpha
(inside the body)
- least ionising
- penetrates through the body
*do **not** accept can be detected externally*
- is a gas / can be breathed in
accept it is not a solid
*(cannot score if **Z** chosen)*
*if **X** chosen can score this gas mark*
*if **Z** chosen can score **both** gamma marks*

1

2

(d) any **one** from:

*do **not** accept kills bacteria*

- longer shelf life
accept stays fresh longer / stops it going bad / mouldy
- food can be supplied from around the world
- wider market for farmers
- cost to consumers (may be) lower
- less likely to / will not get food poisoning
accept infection / disease / ill for food poisoning

1

[8]

Q3.

(a) dust

accept 'solid (s)'

1

space

accept 'from supernova / supernovum / supernovas'

1

(b) By atoms joining together

only one ticked or otherwise unambiguously identified

1

(c) Milky Way (galaxy)

1

(d) The answer depends on beliefs and opinions, not scientific evidence.

only one ticked or otherwise unambiguously identified

1

[5]