

- 3 The tubes of a linear accelerator (linac) get progressively longer along the length of the linac.

Which of the following is the reason for this?

- ☐ A The frequency of the applied potential difference decreases.
- ☐ B The frequency of the applied potential difference increases.
- ☐ C The particles gain mass as they accelerate.
- ☐ D The particles must spend the same time in each tube.

(Total for Question 3 = 1 mark)