

SECTION A**Answer ALL questions.****For questions 1–10 select one answer from A to D and put a cross in the box ☐.****If you change your mind, put a line through the box ☒ and then mark your new answer with a cross ☐.**

- 1** A neutron can decay to produce a proton.

Which of the following equations correctly shows neutron decay?

☐ **A** $n \rightarrow p + e^+ + \bar{\nu}_e$

☐ **B** $n \rightarrow p + e^+ + \nu_e$

☐ **C** $n \rightarrow p + e^- + \bar{\nu}_e$

☐ **D** $n \rightarrow p + e^- + \nu_e$

(Total for Question 1 = 1 mark)