

- 30** A radioactive source is placed 1 cm from a Geiger-Muller tube, and various absorbers are placed between them, one at a time. For each absorber, a one-minute count is taken of the total number of decays, and this is repeated several times. The table shows the results of the experiment.

absorber	average number of decays detected in one minute
none	1043
0.1 mm paper	1040
1 mm aluminium	497
1 cm lead	6

The average background count per minute is 5.

What nuclear radiation do the results suggest the source was emitting?

- A** alpha and beta only
- B** beta only
- C** beta and gamma only
- D** alpha, beta and gamma

End of Paper