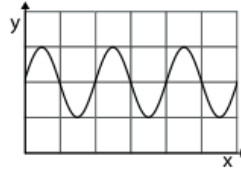


Magnetism

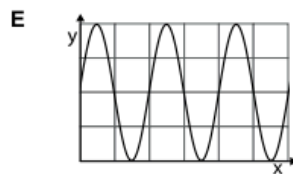
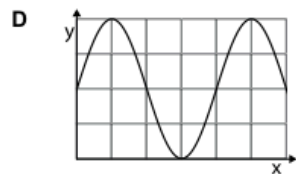
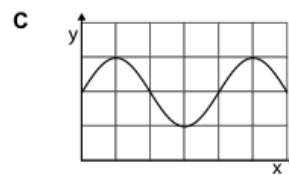
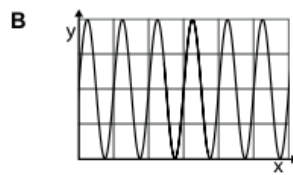
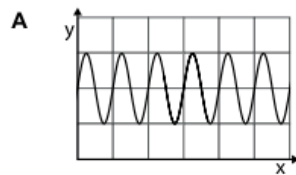
- 11 An AC voltage is induced in a coil of wire when it is rotated in a magnetic field.

This voltage can be displayed on the screen of an instrument called an oscilloscope, which shows the variation of the induced voltage on the y -axis plotted against time on the x -axis.

The oscilloscope trace below is the result of rotating a coil at a constant speed in a uniform magnetic field.



Which one of the following traces would result from rotating the coil at a faster constant speed, whilst keeping all other conditions unchanged? (The scales on the axes do not change.)



2016