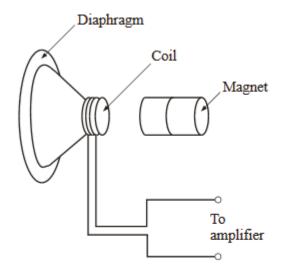
Eduqas Physics GCSE
Topic 8.4: Microphones
and speakers
Questions by topic

1 (HIGHER).

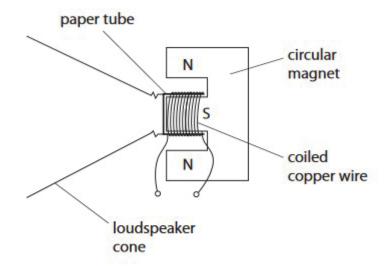
An induction microphone converts sound waves into electrical signals which can be amplified.



Describe the stages by which the sound waves are converted into electrical signals. State whether the signals are a.c. or d.c.	
	(6)

2 (HIGHER).

(b) This diagram shows the construction of a simple loudspeaker.



(4)

A coil of wire is wrapped around a paper tube attached to the loudspeaker cone.

When there is an alternating current in the coil, the cone moves.

Describe how the alternating current generates a sound wave.

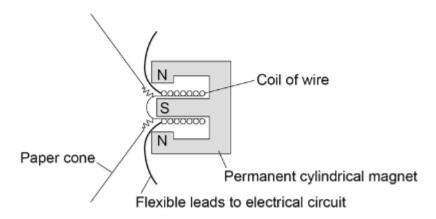
You may draw a diagram if it helps your answer.

3 (HIGHER).

Figure 19 shows the parts of a moving-coil loudspeaker.

A coil of wire is positioned in the gap between the north and south poles of the cylindrical magnet.

Figure 19



Explain how the loudspeaker converts current in an electrical circuit to a sound wave.

[6 marks]