

Question number	Answer	Notes	Marks
4 (a)	Digital: only set values allowed ;  Analogue: any value allowed / 'continuously variable' ;	ACCEPT Idea of on-off OR 1-0 for digital signal  REJECT 'varies' alone / 'continuous' alone / 'varies within a range' REJECT refs to frequency  ACCEPT information in diagrams e.g. labelled correct waveforms	2
(b)	easier to remove noise / can regenerate /  may carry more information / more stations / easier to store /copy / use with computers ;	ALLOW can be cleaned IGNORE 'less noise' alone REJECT carries information faster REJECT easier to amplify  IGNORE refs to quality / clarity of sound	1
(c)	Any <b>three</b> from:  Waves spread out (as they leave the speaker) ;  (Different frequencies / notes have) different wavelengths ;  Diffract most if speaker size matches wavelength ;  Giving a more even sound (if all frequencies diffract equally) ;	ACCEPT this idea on a diagram   ACCEPT this idea on another diagram  e.g. "high and low frequencies have same loudness" OWTTE	3

**Total 6 marks**