

## 2002 Paper 12 Question 3

### Digital Communication I

Consider the real-time transport of audio across a network.

- (a) What are the advantages of digitising the audio? [5 marks]
- (b) What are the disadvantages and how can they be mitigated? [5 marks]
- (c) What characteristics of the end-to-end channel across the network would be desirable, and how are these different from those which would be desirable for time-insensitive data? [5 marks]
- (d) Discuss the applicability of asynchronous and synchronous multiplexing in carrying real-time audio traffic. [5 marks]