## 1994 Paper 12 Question 3

## Digital Communication I

Define the term circuit as used in "circuit switching".
Sketch the design of the in-band switching function of a circuit switch which switches $4 \times 2 \mathrm{Mbps}$ trunks each supporting $32 \times 64 \mathrm{Kbps}$ channels. [8 marks]

Describe how you would augment this design to allow the set up and clearing of connections. You should invent your own simple protocol for this purpose.
[8 marks]

