# Connectivity exam practice. 10 marks

1. What is 00001111 in Denary? (1 mark)  
   a)13  
   b)14  
   c)15  
   d)16
2. In a copper wire cable, what is wrapped in insulation? (1 mark)
3. Describe three strengths of Fibre optic cable (3 marks)
4. By Drawing a diagram, show the set up of an office network including and showing the connection between all necessary and labeled communication hardware (5 marks)

Answers:

1. C)15
2. **Conductor (1)**
3. Fibre optic is the fastest delivery of data by cable (1) It is also light weight and thinner than copper cables (1). Signal can travel over longer distances (1). They are also resistant to electrical interference. (1). They are a low security risk as data is sent so quickly (1).
4. Up to two marks for correctly labeled and shown hardware:  
   Switch, Hub, Router, Client, Server, Modem (3)  
   (1) the Modem connects to the internet  
   (1) The router connects to the modem  
   (1) A clear toplogy is shown (RING/BUS/STAR)