(a) Routing across the Internet is held together by the Border Gateway Protocol (BGP). Describe how BGP differs from the Interior Gateway Protocols (for example, a link-state scheme), and how this leads to a number of scalability challenges. [10 marks]

(b) Multicast routing was introduced to meet the demand for live-streamed content to multiple simultaneous receivers. It has seen limited deployment due to a number of operational challenges, including how it might interact with inter-domain routing, accounting, and security. Describe these challenges. [10 marks]