Q1: All the following sentences are incorrect; re-write each sentence after correcting the underlined phrases: (12.5 M)
   1. RJ-45 connectors are used with the coaxial cables.
   2. In OSI reference model the application layer is concerned with the syntax and semantics of the information transmitted over networks.
   3. The most secure cable against attackers is coaxial cable because it is difficult to tap.
   4. CRC and VRC use parity check in the error detection method.
   5. In hierarchical routing the optimal number of levels for N router subnet is \( \frac{N}{N} \).
   6. The address class B has a subnet mask of 255.255.255.0.

Q2: Define the following with examples: (12.5 M)
   1. Static routing.
   2. Microwave transmission.
   3. MAN.

Q3: A: Explain the service and protocol in layered networks? Is there any relationship between them? (6.5M)
   B: Given a 6-bit sequence 100100 and a divisor 1101, find the CRC. Check your answer. (6 M)

Q4: What are the layers of the TCP/IP reference model? Explain all of them. (12.5 M)

Q5: Describe the flooding routing algorithm and then explain its uses in computer application. How can you develop flooding algorithm? (12.5 M)