

**FACULDADE DE COMPUTAÇÃO – FACOM**  
**GBC056 – Arquitetura de Redes de Computadores**

**“Design and Validation of Computer Protocols” - Gerard Holzmann**

**Problems extracted of the Text Book**  
**Chapter 02 – Structure of Protocols**

- 01** - Identify the five protocol elements from Section 2.2 (The Five Elements of a Protocol) for the torch telegraph of Polybius, discussed in Chapter 1 - Introduction. List at least three cases of incompleteness in the protocol.
- 02** - Give an informal description of the procedure rules of a protocol that manages the data transfer from a file server to a printer (Section 2.1 - Introduction). Make sure that the protocol can recover when the printer runs out of paper or is switched off line.
- 05** - Explain why a byte count is most conveniently placed in a message header (Section 2.5 – Vocabulary and Format).
- 06** - Explain the difference between bit stuffing and character stuffing.