Quien firma, acepta cumplir como estudiante lo dispuesto en el Código de Ética de la ESPOL, con respecto al capítulo “Comportamiento de la Comunidad Politécnica” en todos sus artículos. En caso de no cumplimiento, aceptaré las sanciones que disponga la ESPOL hacia mi persona.

Student signature:

Circle the answer that fits the best among the options given.

Provide answers with technical criteria. Each argued answer will pass through an exhaustive revision.

1) Explain the net neutrality principle with at least one advantage and one disadvantage. Mention how an end-user can be benefited by the content distribution.

2) At the moment of choosing the technique of Weighted Fair Queueing (WFQ), what is the behavior of the data traffic according to the queue size and the bandwidth available?

3) When applying congestion control in data buffers:
   a) Explain the performance attained during transmission.
b) Mention the layers involved in congestion control and flow control

c) Why the sending rate could be optimal for the transmission of streaming contents?

4) Provide a schematic that describes the QoS prioritization process in real-time data networks.

5) Mention at least one disadvantage of the technique of metering an IP packet stream and marking by coloring (green, yellow, or red)?