CALIDAD DE SERVICIOS DE RED (TLMG1005)
MIDTERM – FIRST SEMESTER 2018

FIEC

STUDENT: **ID:**

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 acatar las sanciones que disponga la ESPOL hacia mi persona.

Student signature:

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

1) In the Ecuadorian market, in case of applying a regulation against the net neutrality principle:

   a. Who do you think will be the potential affected users?

   b. How do you think this policy would affect to the streaming services?

   c. Do you consider appropriate the application of content differentiated systems by fees?

2) Regarding the congestion control in data buffers:

   a. What are the differences between congestion control and flow control?

   b. Why does the sending rate (rate control) turn suitable for streaming contents?

   c. Explain the mechanism of the window-based congestion control.

   d. Mention at least one difference between congestion control and priority control.

3) Explain with an example the network boundary tasks in the border marking technique throughout a DiffServ scenario.

4) Regarding to an end-to-end consistency in a per-hop behavior (PHB) scenario, why the classification process on the downstream router can simply ignore the contents of the packet?
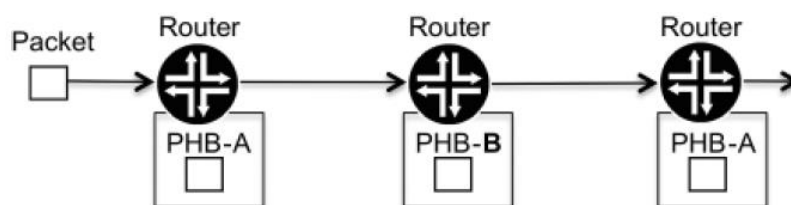
5) Regarding to the IntServ QoS architecture model:

a. It is a good solution for managing flows in small networks.

    True   False

b. It is based on service classes and per-hop behaviors.

    True   False

c. It needs an end-to-end resource reservation protocol to enable a host to establish a connection over connectionless IP Internet.

    True   False

d. Resource allocation is distributed among some routers domain, allowing for a greater flexibility and efficiency in the routing process.

    True   False

e. The processing is per-flow based through signaling and processing load.

    True   False

IntServ

Flow (Caudal) →

Best effort

Controlled load

Guaranteed forwarding

Time →