## Quiz #1

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Question 1: Circuit switched service architectures And related fundamental principles

It is important to make the difference between:
1. Goal
2. Fundamental principles
3. Concepts
4. Implementation techniques
Question 1: Circuit switched service architectures and related fundamental principles

1. IN:
   - Separation of switching software and service logic
   - Standardization of capabilities for building services

2. WAP:
   - Optimal usage of scarce air interface resources
   - Optimal usage of limited terminal capabilities
   - Independence of underlying bearer (e.g. GSM, TDMA, PDC)

3. TINA-C:
   - The separation principle
   - Business model as starting point for specifications
Question 2: TINA-C Business model

**Consumer**
- End-user: Actual user of the service
- Subscriber: Entity having the business agreement for service usage

**Retailer**
- One stop shop
- Entity which provides the services and which has the business agreement with the subscriber
- Can provide own services or services subcontracted from third parties

**Third party service provider**
- Has business agreement with retailer and no direct business agreement with subscribers

**Communication/connectivity provider:** Pipe provider

**Broker:** Ensure fair information distribution to all parties
Question 3 – Three key differences between IntServ and DiffServ.

Several possible correct answers – Check course notes
For next quiz, please do not give more than three answers.
Otherwise you may loose points
I may select only the wrong answers

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Question 4 – Three key differences between SIP and H.323

Several possible correct answers – Check course notes
For next quiz, please do not give more than three answers.
Otherwise you may lose points
I may select only the wrong answers
Question 5: Call intrusion & Megaco context

1. Call intrusion allows user A to establish a call with a busy user B by breaking into the call between B and C, which result in 3 party call

2. Megaco context
   - Is an association between terminations
   - It specifies who can hear/see/talk to whom
   - It may imply: Conversion (RTP stream to PSTN PCM and vice versa), mixing (audio or video)

3. Add-to-Context
Question 6: Sequence diagram

A very wide range of correct (or wrong) answers

Key points

1. At the end of the process A, B and C need to be connected in a full mesh way
   • Invite (A,B), Invite (A,C) and Invite (B,C)
   • - 2 if they are not

2. At the end of the process, S should not be in the conference
   • -1 if it is

3. A, B, and C cannot take initiative. They do only what they are asked to do because the conferencing logic is fully implemented in S
   • - 2, if A, or B or C takes initiative

4. REFER and/or ALSO need to be used properly (i.e. according to their semantic / syntax)
   • - 2 if they are not
Question 6: Sequence diagram

1. First category of solutions: REFER
   - Can be used with and without prior INVITE
2. Second category of solutions: ALSO
3. Third category of solutions: REFER + ALSO