

## technology

Multimedia is an area that abounds with facts, acronyms and technology. You must have a basic knowledge of the most common concepts and abbreviations. You must also know some facts, concerning the application of multimedia and the technology it involves.

technology (1)

- Give a brief sketch of the development of *digital entertainment*.
- Characterize: HDTV, SDTV, ITV.
- Discuss convergence with respect to *platforms*.
- Discuss convergence with respect to *delivery*.

technology (2)

- Discuss which developments make a large scale application of multimedia information systems possible.
- Give a characterization of an object, a query and a clue in an *information space*.
- Describe the *Dexter Hypertext Reference Model*.
- Give a description of the *Amsterdam Hypermedia Model*.

technology (3)

- What is the *data rate* for respectively (*compressed*) voice, audio and video?
- Explain how a *codec* functions.
- Which considerations can you mention for choosing a compression method?
- Give a brief description of: XML, MPEG-4, SMIL, RM3D

technology (4)

- Give a definition of: *shape descriptor* and *property descriptor*. Give an example of each.
- How would you define *edit distance*?
- Characterize the notions *precision* and *recall*.
- Give an example (with explanation) of a *frequency table*.

technology (5)

- What are the parameters for *signal-based (audio) content*?

- Give an example of the representation of *frame-dependent* en *frame-independent* properties of a video fragment.
- What are the elements of a query language for searching in video libraries.
- Give an example (with explanation) of the use of *VideoSQL*.

technology (6)

- Describe (the structure of) a video database, using *media abstractions*.
- Give a (formele) definition of the notion of a *structured multimedia database*.
- Give an example (with explanation) of querying a *hybrid multimedia database*.
- Define (and explain) the notion of *virtual objects* in *networked multimedia*.

technology (7)

- Give a brief characterization of: VRML.
- What is a *viewpoint transformatie*?
- What kinds of navigation can you think of?
- How may intelligent avatars be realized? Give an example.