

1. Fill in!

Analog television (ATV) transmits an **analog** signal whose amplitude values vary over a **continuous** interval.

2. Analog signal is influenced during transmission by:

X interferences

☐ light

X noise

☐ antenna gain

3. Analog signal carries:

1. **audio signal (sound)**
 2. **video signal (information about picture brightness and color)**
 3. **synchronization information (horizontal, vertical)**
-

4. Fill in correctly!

Digital television (DTV) transmits **digital** signal. Because source video and audio signals are analog signals they have to be **digitized** at first, subsequently **compressed** and then **combined** to form a transport signal (stream) that is adjusted for broadcasting finally.

- **digitized**
 - **digital**
 - **compressed**
 - **combined**
-



5. DVB technology adopted compression standards of a group:☐ JPEG☒ **MPEG**☐ CPEG☐ GPEG

6. MPEG-2 standard (just as MPEG-1) defines three main parts:1. **MPEG-2 system**2. **MPEG-2 video**3. **MPEG-2 audio**

7. Assign correct definition!I (Intra) frames ___ **C** ___P (Predicted) frames ___ **A** ___B (Bi-directional) frames ___ **B** ___

A – are coded in reference to previous (I or P) picture. These pictures only carry information about a change (motion) between previous and actual picture.

B – are similar to the P pictures but they are also coded in reference to a picture which follows that's why they are coded by bidirectional interpolation.

C – are coded in similar way like JPEG pictures without any reference to other video pictures. They contain all information needed to reconstruct original pictures but provide lowest compression rates.

8. H.264/MPEG-4 AVC codec supports:☒ **HD (High definition) video**☐ VHF (Very high frequency) video☐ UHF (Ultra high frequency) video☒ **UHD (Ultra high definition) video**

Erasmus+

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9. HEVC (High Efficiency Video Coding) standard can:

- ☐ provide medium picture quality
- ☐ define three audio layers

X double compression rate at the same level of video quality

- ☐ discrete Laplace transform

