Test – 21.11.2011 Version A   Name_____ Group_____

1. Describe briefly, three special effects from Audacity and their effects on sound. (1p)

2. Describe the main differences between complementary and non-complementary noise reduction systems? (1.5p)

3. Find the inter-modulation distortion (IMD in %), if first frequency (60Hz) has 800 mV, second input frequency (5000Hz) 1V and the intermodulation component has 10mV? Find the frequencies of first order intermodulation components. Present the general formula for IMD calculation. (1.5p)

4. Which function is performed by grayscale filter on the video signal, if the basic components of a point are (Y, Cr, Cb) (1.5p)

5. Present the encoding diagrams (temporal) for FM and MFM for the following sequence: 010011010. Build the same encoding sequence using RLL(2,7) code (bitstream only). Add, if necessary, bits of 0 to complete the branch. (2p)

6. Describe briefly the main features of the circuits, for example SAA7134 (number of video inputs, video standards)(1.5p)