

Answer briefly (at most 15 lines) to all questions. If you write more only the first 15 lines will be read, so please think before you write, concentrate on the important points and stay on topic.

You may answer in either English or Finnish.

1. In the lecture on attention, specific mechanisms were introduced that might help filter task-relevant sounds during selective attention. Please describe these potential mechanisms briefly.
2. How is multisensory information integrated in the superior colliculus of the midbrain?
3. Explain the concepts:
  - Psychological construction theories of emotion
  - Basic emotions
  - Valence and arousal
  - Survival circuits
  - The role of amygdala in emotional processing
4. What acoustic cues is localization of sound sources based on? How are auditory cortical cells sensitive to the direction of incoming sounds?
5. What is the role of hippocampus in declarative and non-declarative memory? Justify your answer.