

Cognitive Neuroscience for AI Developers [CNAID] Mock Exam

Full Name: _____

Matriculation number: _____

Course of studies: _____

- You have 90 min to finish the exam.
- You are not allowed to use any electronical devices, such as computers, tablets, phones, calculators, etc.
- The space below the questions should be sufficient to answer the question. That also indicates how elaborate your answers needs to be to gain full credits per questions. If you need, however, extra space, more paper can be requested.
- Please ensure that we are able to read your handwriting. Illegible and/or ambiguous answers will not be graded.

[] Please send me emails for upcoming events and open positions to the following E-mail address:

I have read all the information above and entered required data truthfully

Signature

Matriculation number: _____

13. What is the BOLD effect?

14. Connectivity analysis can be performed on multiple levels.
Name the levels and their scale.

15. Who was Phineas Gage?

16. What is the WADA test?

17. What are hair cells?

18. What is olfaction?

Matriculation number: _____

19. List all five tastes humans are able to perceive. Indicate which tastes rely on binding the tastant to the receptor.

20. The Homunculus is a special representation of the primary somatosensory cortex. Describe its unique appearance and the relationship to the primary somatosensory cortex.

21. Voltage-gated sodium channels are important in pain mediation. Which voltage-gated sodium channel is essential in pain sensation? Describe its involvement briefly.

22. Describe the two kinds of photoreceptors in our retina.

23. Explain how color emerges on a camera chip.

---- the following questions use material that will be available at the end of the week ----

24. Which brain structure is important in acquiring new motor tasks?

25. What is implicit memory?

26. What is the N400 wave?

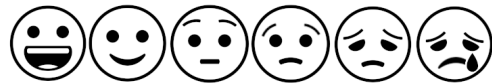
27. Describe the Libet experiment.

Exam evaluation

I had enough time



The questions were fair



I understood the questions



I'm happy that this exam is over

