Cognitive Neuroscience for AI Developers [CNAID] Mock Exam

Full Name:	
Matriculation number:	
Course of studies:	
 phones, calculators, e The space below the condition indicates how elaborated in the condition in the condi	use any electronical devices, such as computers, tablets, tc. questions should be sufficient to answer the question. That also te your answers needs to be to gain full credits per questions. extra space, more paper can be requested.
[] Please send me emails E-mail address:	s for upcoming events and open positions to the following
I have read all the information	above and entered required data truthfully
Signature	

	Matriculation number:
1.	What are the central ideas of cognitive science?
2.	Name examples for computations performed by the mind.
3.	What is monism?
4.	What is voluntarism?
5.	What is the role of glia cells?

6. Describe one of the major "neural activity generation" models.

	Matriculation number:
7.	Elaborate which neural structures are correlated with plasticity and how they react in a learning paradigm
8.	What is the peripheral nervous system?
9.	What are cortical columns?
10.	Hox genes are very important in development. Describe briefly their role.
11.	Describe the differences between EEG and ECoG/iEEG.
12.	Genetically encoded calcium indicators are used to monitor neural activity. Explain briefly how this works.

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?

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.
	following questions use material that will be available at the end of the week Which brain structure is important in acquiring new motor tasks?

Matriculation number:

Matriculation number:	

25. What is implicit memory?

26. What is the N400 wave?

27. Describe the Libet experiment.

Exam evaluation

The questions were fair

I understood the questions

I'm happy that this exam is over