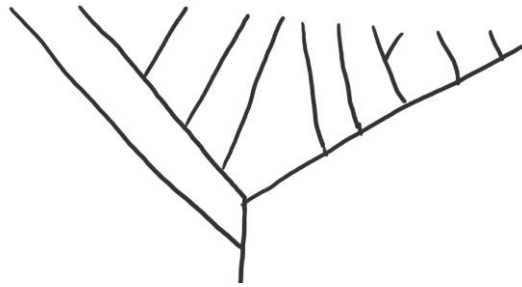


## Exam 2024

### 1. Phylogeny (12P)

Rat, Bee, Zebrafish, Spider, Hydra, Beetle, Lizard, Human, Frog, Octopus, Monkey, Bird



### 2. Evolution

“The Theory of Evolution, originally conceived by ....., is a grand unifying theory in biology. It can be defined in one sentence as .....

It is founded on two key biological mechanisms, namely..... and.....

The key value of the Theory of evolution is that it can explain four paramount aspects that pertain to all life forms: ....., ....., ....., and.....

The Theory of Evolution is a theory in the true sense because it is supported by an overwhelming amount of empirical evidence. Here is empirical evidence from embryology:

.....; and this is evidence from comparative anatomy:

### 3. Pallium

Draw parts + table which these parts develop into

### 4. Mammalian PFC

Table of different anatomical structures of primate vs. rodent brain.

### 5. Working Memory

- What types of WM codes are indicated by the two patterns in I) and II)?
- Which tuning to different stimuli would the individual neurons of the respective populations show across the delay period in situations I) and II) (use drawings).

### 6. Neuronal effects of attention

Draw and name the four different effects of attention on the neural tuning.

### 7. Social Decision Making and Morality (Koenigs et al. 2007)

- Which type of subjects were explored in this study and what was the focal brain area investigated?
- What impairments were tested prior to the test and how was this measured?
- Which test and task condition were used to test the impact?
- What was the key finding...?

### 8. Signs

Snake alarm call of monkey is a(n) \_\_\_\_\_.

Five notches on a tally stick is a(n) \_\_\_\_\_.

Numerical 5 in the formula “ $x + 5 = 8$ ” is a(n) \_\_\_\_\_.

A deer on a traffic sign is a(n) \_\_\_\_\_.

Tears are a(n) \_\_\_\_\_ for grief or sorrow.

The vocalization “meow” is a(n) \_\_\_\_\_ for a cat.

### 9. Theory of Mind

What orders of intentionality are indicated by these:

- “I want a drink”
- “I think that you know that I believe that you desire my girlfriend”

### 10) Social learning → same as in Exam 2020