

## SENSURVEILEDNING

<b>Emnekode og navn:</b> PSY1122/PSY1502/PSYK4122 Innføring i kognitiv psykologi	<b>Semester / År / Eksamenstype:</b> V2023/ Skriftlig eksamen, 4 timer
<b>Answer two out of the following three questions:</b>	
<b>Svar på to av følgende tre oppgaver:</b>	
<b>Oppgave 1:</b>	
Eng: Explain the difference between "sensation" and "perception." Be sure to include a discussion of where or how these concepts overlap (if they do overlap) as well as where or how they do not overlap (if they do not overlap).	
No: Forklar forskjellen mellom sansning og persepsjon. Sikre at du inkluderer en diskusjon om hvor eller hvordan disse begrepene overlapper (hvis de overlapper) såvel som hvor eller hvordan de ikke overlapper (hvis de ikke overlapper).	
Nyno: Forklar skilnaden imellom sansning og persepsjon. Sikre at du inkluderar ein diskusjon om kor eller korleis desse begrepa overlappar (om dei overlappar) såvel som kor eller kordan dei ikkje overlappar (om dei ikkje overlappar).	
<b>Oppgave 2:</b>	
Eng: Discuss how human language may differ from animal communication systems and explain some basic processes in human language comprehension.	
No: Diskuter hvordan menneskelig språk kan være ulikt dyrs kommunikasjonssystemer og forklar noen grunnleggende prosesser i menneskelig språkforståelse.	
Nyno: Drøft kordan menneskeleg språk kan væra ulikt dyrs kommunikasjonssystem og forklar nokre grunnleggande prosesser i menneskeleg språkforståelse.	
<b>Oppgave 3:</b>	
Eng: Explain Baddeley's working memory model and discuss the role of the central executive in human cognition.	
No: Gjør rede for Baddeleys arbeidsminnemodell og diskuter rollen til «the central executive» i menneskelig kognisjon.	
Nyno: Gjer greie for Baddeleys arbeidsminnemodell og diskuter rolla til «the central executive» i menneskeleg kognisjon.	

### Relevant pensumlitteratur:

Gilhooly, K., Lyddy, F. and Pollick, F.: Cognitive Psychology.

### Eksamenskrav:

#### Oppgave 1:

##### Sensation vs Perception

We have five different sensory organs: eyes, nose, ears, tongue, and skin. These five sensory organs are responsible for receiving different stimulations around us through seeing, smelling, hearing, tasting, and, finally, feeling through the skin. The signals which are received through our sensory organs from the environment around us are called sensations. Simply put, sensations are what our sense organs receive and transmit to the brain. Once the brain receives the stimulus, it converts the whole signal into feelings, taste, sound, sight, and smell. On the other hand, perception is almost like a sixth sense. It is what we perceive or form an opinion on of anything and everything happening around us. The perception of a person is an absolutely personal experience. It is what a person thinks about his or her environment, and it is how the person looks at the world around him. It is more of a psychological concept than anything physical like sensations. Two different people can have different perceptions about the same thing. For example, in body image, a healthy person has a different perception about his or her body. Healthy people, even if they are a little overweight, react and see themselves differently and accept who they are or work towards achieving what they want. Once they achieve it, they stop. While an anorexic person, no matter how slim, no matter how underweight, has a perception that they are still overweight and stops eating food altogether to achieve, what they perceive, to be the right body for them.

Perception is what a person wants to believe, their personal opinion. People of different generations or people of different religions or people from different backgrounds have a difference of opinion only because they perceive everything differently. Wise people try to understand the perceptions of other people whereas unwise people believe that what they perceive about a situation or about a person is the only correct perception.

Perception and sensation are different mostly because sensation is more physical. Sensations arise only because the body receives a stimulus, and the body reacts to it converting the stimulus into one of the things that one of the sensory organs of the body can identify. However, perception is absolutely psychological. Perceptions are individual thoughts of individual people.

Summary: Sensation is the process of hearing, smelling, feeling, tasting, and seeing as a result of external stimulations received by the five sensory organs of the body; ears, eyes, nose, tongue, and skin. Perception, however, is the mental image of something or somebody made due to the different actions exhibited by the environment around us.

#### Oppgave 2:

As this question is relatively open it will require for the students to narrow down to cover some topics. A discussion of Charles Hocketts criteria, or only some of these is relevant.

Topics from both chapter 10 and 11 can be chosen and discussed. Explanations of the challenges and fundamental processes in language comprehension are relevant: The invariance problem, segmentation, speech perception, categorical perception are all very relevant topics to discuss. So are top-down influences, audiovisual perception, models of speech perception which can be focused on one or two of the models explained in chapter 11. Comprehending words and sentences, lexical access and priming effects. Both syntactic and semantic influences on comprehension are relevant. The answer may not focus solely on oral understanding. Writing systems and context effects on visual word recognition are relevant. So is the neuropsychological angle on both oral and written language comprehension. Students are free to include or exclude any of the mentioned topics. If something is excluded and just a few topics are focused, the answer should be more in-depth on those.

### **Oppgave 3:**

In the first part the student should/could:

1. Define working memory, e.g. "holding information in mind and mentally working with it".
  - a. The student can also separate WM from Atkinson and Shiffrins view on short-term memory (manipulation vs storage).
2. Explain the function of each modality of Baddeleys working memory model.

Discussion on the central executive is more open, but could include:

1. A definition:
  - a. The workhorse and mastermind of human cognition; a supervisory system that controls and coordinates the other structures
2. Executive functions
  - a. Automatic vs. Non-automatic (habits vs non-routine) actions
    - i. E.g. Norman and Shallice's supervisory activating system (1986)
3. Examples from real-life, or research
  - a. E.g. Stroop test, Corsi-block task, dorsolateral prefrontal cortex, dysexecutive syndrome
4. Reflection
  - a. The relationship between the central executive and other parts of human cognition is a plus (e.g. learning, perception, consciousness)
  - b. Lack of research on the central executive
  - c. Double dissociation of function
5. Not all of the above have to be included for top scores. Other themes from the curriculum could very well be relevant here. The overall impression of student's precision, critical reflection and independence matters (j.fr. karakterskalaen).

### **Karakterbeskrivelse:**

<https://innsida.ntnu.no/wiki/-/wiki/Norsk/Karakterskalaen>

### **Faglærer / oppgavegiver:**

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