

English version

Only three (3) of the four following questions must be answered. Keep the answers brief! Answers can be written in English, Norwegian, Swedish, or Danish.

Question 1 – Cognitive Psychology: (a) Define the term “cognition” as used in psychology. (b) What was the “cognitive revolution”? What was its major result? (c) What is the difference between “computer simulation” as method of cognitive psychology and “artificial intelligence”?

Spørsmål 1 – Kognitiv Psykologi: (a) Definer begrep «kognisjon» som brukt i psykologi. (b) Hva var den «kognitive revolusjonen»? Hva var det viktigste resultatet? (C) Hva er forskjellen mellom «computer simulering» (engelsk: “computer simulation”) som metode i kognitiv psykologi og «artifisiell intelligens» (“artificial intelligence”).

Answer: (a) Clear definition pointing out the role of internal representation and cognitive operations; examples alone are not sufficient (1p); (b) Paradigm shift in psychology (triggered by computer development) from behaviourism (negating the relevance of internal processes) to modern cognitive psychology (information processing idea: resulting in emphasising the relevance of internal mental representations/operations and the possibility of studying these (2p); (c) simulation: programming computers to mimic underlying mental representations, operations (processes) that produce specific types of human performance; AI: carry out complex tasks efficiently, whereby the way it is implemented does not follow how human cognition works (2p)

Question 2 – Attention: (a) Describe “change blindness” and briefly explain how it can be studied (e.g., in an experiment). (b) What is phenomenon “inattentional blindness” and how does it relate to “change blindness”. (c) How can a magician use these phenomena to improve a “magic” trick?

Spørsmål 2 - Oppmerksomhet: (a) Beskriv «forandringsblindhet» (“change blindness”) og forklar kort hvordan det kan studeres (for eksempel i et eksperiment). (b) Hva er fenomenet «uoppmerksom blindhet» (“inattentional blindness”) og hvordan forholde det seg til «forandringsblindhet». (c) Hvordan kan en magiker nytte disse fenomenene for å forbedre magisk triks.

Answers: (a) substantial changes in a picture from one moment to the next are not detected (1p), Rensink exp as described on p.96; or anything else that might make sense (1p); (b) failure to notice visible target since attention is diverted, see p.97 (1p); important here is not realise that the “change blindness” can also be caused by participants not “looking” at the right location, while “inattentional blindness” occurs when participant is looking at the target stimulus. So it shows that the “blindness” is

based on attention (what is not clear in change blindness) (1p). (c) any good argument, should be sth like “make sure that the attention is not on the “trick object/action” (1p).

Question 3 - Learning: Encoding, storage, and retrieval: (a) Describe the “method of loci” mnemonic strategy (e.g. for encoding a shopping list). (b) Use the “dual coding hypothesis” proposed by Allan Paivio to explain why the “method of loci” improves memory. (c) A friend seeks your advice with his “learning difficulties”. He reports to have no difficulties in retrieving newly learned information when at home (the place where he is usually revising), while he has severe difficulties retrieving this information when in the examination room. How is this memory phenomenon called. How could he improve his memory performance when in the class-room?

Spørsmål 3 - Læring: Innkoding, lagring og gjenhenting: (a) Beskriv «method of loci» mnemonic-strategi (f. eks. for å huske en handleliste). (b) Bruk "dual coding hypothesis" », foreslått av Allan Paivio; for å forklare hvorfor method of loci” forbedrer minnet. (c) En venn spør deg for å få råd med hensyn til en "lærevanske" han har. Han rapporterer at han ikke har noen problemer med å gjenhente nylig lært informasjon når han er hjemme (stedet hvor han vanligvis leser pensum), mens han har alvorlige vanskeligheter med å gjenhente den samme informasjonen i eksamenslokalet. Hva kalles dette hukommelsesfenomenet. Hvordan kan han forbedre sin minneytelse når han er i eksamenslokalet?

Answer: (a) familiar route is imagined and images of the items to be recalled are linked to landmarks along this route (s. p. 182), **1p**. (b) MoL forces to verbally and visually (imagine) encode the to be learned items; Paivios has shown that such dual encoding improves memory compared to “unimodal” verbal encoding (like a shopping list) (**1p** for describing the Dual coding theory, + **1p** for seeing the parallel to MoL); (c) Encoding-specificity principle = Retrieval is enhanced when the cues available (during retrieval) match the features present/stored during encoding OR (more specific) context-dependent retrieval = better recall performance in same environment (either gives **1p**). Any acceptable idea, but ideally imagining the exam hall during encoding OR imagining the encoding environment during exam (**1p**).

Question 4 – Emotion and cognition. (a) According to Ekman’s classification, which emotions are considered as basic emotions? What are the characteristics of basic emotions (name at least four different characteristics)? (b) Briefly describe the cognitive component of emotions. Name three additional components of emotions. (c) According to the “affective primacy theory” (R. Zajonc), why does one like a pop-song more, the more often the song is played in the radio?

Spørsmål 4 – Emosjon og kognisjon: (a) Ifølge Ekmans klassifisering, hvilke emosjoner anses som grunnleggende emosjoner? Hva er kjennetegnene til grunnleggende emosjoner (oppgi minst fire forskjellige egenskaper)? (b) Beskriv kort den «kognitive

komponenten» av emosjon. Nevne tre ytterligere komponenter av emosjoner. (c) I henhold til “affective primacy theory” (R. Zajonc), forklar hvorfor man liker en popsang mer, jo oftere sangen spilles i radio?

Answers: (a) fear, anger, disgust, happiness, sadness, surprise (1p); the table 14.2 in the book lists 9 characteristics of basic emotions, any combination of them is correct (1p); (b) cognitive component – appraisal or registering the emotional significance of the event (1p); other components are the motivational/behavioral, somatic, and subjective/experiential (1p); (c) mere exposure effect, stating that people can develop preference for stimuli through repeated exposure (1p)