

i**TIG001 Kognitiv psykologi, 7,5 hp, delkurs 1, HT 2022****Kognitiv psykologi, 5 hp**

TENTAMEN

Tentamen består av 50 flervalsfrågor där ett svarsalternativ är korrekt. Maxpoäng är 50, gränsen för Godkänt är 31 och för Väl godkänt 44 poäng. Frågorna är formulerade på engelska.

Tillåtet hjälpmedel: sve-eng/eng-sve lexikon (utan anteckningar)

i

Cognitive psychology as a science

1 The development of computers facilitated research in cognition by

Välj ett alternativ:

- more accurately capturing reaction time.
- discrediting behavioral principles.
- suggesting hypotheses that framed the steps of cognition as stages of information processing.
- integrating elements of subjective experiences.

Totalpoäng: 1

2 Which of the following statements provides the most serious obstacle to the use of introspection as a source of scientific evidence?

Välj ett alternativ:

- Introspection is only effective for children, because children have not yet learned to inhibit their own self-reports.
- Introspection is a valid method only if the person doing the introspection goes into a trancelike state.
- The process of reporting on one's own mental events is too slow to be scientifically useful.
- When facts are provided by introspection, we have no way to assess the facts themselves, independent of the reporter's perspective.

Totalpoäng: 1

3 What evidence supports Edward Tolman's belief that it is possible for rats to acquire new knowledge?

Välj ett alternativ:

- development of a cognitive map
- decreased avoidance of punishment
- increased physiological response to a reward
- observational introspection

Totalpoäng: 1

- 4 A participant is asked to look within himself or herself and report on his or her own mental processes. This method is called

Välj ett alternativ:

- mentalistic study.
- logical inference.
- introspection.
- reconstruction.

Totalpoäng: 1

- 5 Which of the following would a classical behaviorist be LEAST likely to study?

Välj ett alternativ:

- a participant's response to a regularly occurring situation
- changes in a participant's behavior that follow changes in the environment
- principles that apply equally to human behavior and to the behavior of other species
- a participant's beliefs

Totalpoäng: 1

i
Visual perception

6 As you move toward an object, the object gets larger on your retina. This is called

Välj ett alternativ:

- linear perspective.
- motion parallax.
- size constancy.
- optic flow.

Totalpoäng: 1

7 The cues to depth perception

Välj ett alternativ:

- are inconsistent across individuals.
- are random.
- change based on one's age.
- generally rely on simple principles of physics.

Totalpoäng: 1

- 8 Shadowing can provide a cue for depth. For example, if a shadow appears on the bottom of a circle, the object appears convex. However, if the shadow appears on the top of the object, it appears concave. This happens because

Välj ett alternativ:

- we are born with the ability to discriminate depth through use of shadows.
- we were taught in school how to interpret shadows.
- we have a part of the visual cortex that is dedicated to the interpretation of shadows that are at the bottom of an object.
- in the real world, light comes from above more often than from below.

Totalpoäng: 1

- 9 It is possible to perceive depth with one eye closed because of

Välj ett alternativ:

- perceptual disparity.
- lateral inhibition.
- monocular cues.
- feature detectors.

Totalpoäng: 1

10 The observation that different neurons function as dot, edge, and movement detectors suggests that

Välj ett alternativ:

- rods and cones are more complex than initially understood.
- different neurons have different receptive fields.
- lateral inhibition is essential in visual processing.
- neurons have similar preferences.

Totalpoäng: 1

i

Recognizing objects

11 Participants' recognition thresholds are

Välj ett alternativ:

- lower for words with unusual spelling.
- not affected by priming.
- higher for recently seen words.
- lower for frequently seen words.

Totalpoäng: 1

12 A vertical line (like the "l" in "line") would likely contribute to the activation of all the following nodes in a feature net EXCEPT

Välj ett alternativ:

- O
- CK
- CLICK
- K

Totalpoäng: 1

13 The recognition of faces

Välj ett alternativ:

- resembles other forms of recognition in that our ability to recognize faces is relatively unimpaired by changes in viewing angle or orientation.
- is influenced by the face's overall configuration, suggesting that a model based on feature detection will provide a poor explanation of face recognition.
- seems to rely on the detection of features and geons, indicating that the recognition by components model can be applied to face recognition.
- differs from other forms of recognition in that face recognition appears not to be influenced by expectation or knowledge effects.

Totalpoäng: 1

14 If instructed to identify the briefly presented word “fish,” which of the following hints will likely provide the greatest benefit for identification?

Välj ett alternativ:

- The word will be shown for 50 ms.
- The word does not contain an O.
- The word is something you can eat.
- The word will be presented in capital letters.

Totalpoäng: 1

15 Knowledge of some sorts is likely to be represented by a broad pattern of activation spread across a network. This reflects

Välj ett alternativ:

- localized representation.
- viewpoint independence.
- top-down processing.
- distributed representation.

Totalpoäng: 1

i
Paying attention

16 Priming based on specific expectations about the identity of the upcoming stimulus produces

Välj ett alternativ:

- no benefit for processing if the expectations are correct but slows processing if the expectations are incorrect.
- a benefit for processing if the expectations are correct but has no effect on processing if the expectations are incorrect.
- the same benefit as stimulus-based repetition priming.
- a benefit for processing if the expectations are correct but slows processing if the expectations are incorrect.

Totalpoäng: 1

17 The data from patients with brain damage to circuits controlling attention indicate that

Välj ett alternativ:

- multiple brain mechanisms are responsible for the control of attention.
- a single mechanism governs the ability to disengage attention from its current focus and the ability to lock into a new attention focus.
- the brain mechanisms controlling attention are inseparable from the brain mechanisms directly involved in perception.
- the mechanisms controlling attention are located primarily in subcortical areas and the midbrain.

Totalpoäng: 1

18 The existence of task-general resources is indicated by the fact that

Välj ett alternativ:

- if a task has been heavily practiced, it is more likely to cause interference with other tasks.
- interference between two tasks can sometimes be observed even if the two tasks have few elements in common.
- similar tasks will not interfere with each other.
- some brain lesions disrupt all tasks requiring attention.

Totalpoäng: 1

19 Which of the following statements is NOT true of executive control?

Välj ett alternativ:

- It is used to keep current goals active.
- It seems to rely on the prefrontal cortex.
- It inhibits distracting thoughts.
- It is needed for habitual responding but not for goal-directed behaviors.

Totalpoäng: 1

20 Sometimes we can complete competing tasks at the same time, but sometimes we cannot because the tasks interfere with each other. Which combination of tasks is likely to cause the LEAST amount of interference?

Välj ett alternativ:

- tasks that require general resources
- two tasks that require different task-specific resources
- tasks that require the same task-specific resources
- a task that requires general resources and one that requires task-specific resources

Totalpoäng: 1

i

The working-memory system

21 The helper within the working-memory system that stores visual materials is called the

Välj ett alternativ:

- visuospatial buffer.
- visuocentral executive.
- iconic storage.
- rehearsal loop.

Totalpoäng: 1

22 You are watching TV when a commercial advertising a new pizza place comes on. You decide you want pizza, so you listen to the restaurant's phone number and then recite the number to yourself. Just as you are about to dial, your cell phone rings and you talk on the phone for a few minutes. What is most likely to happen after you finish your call?

Välj ett alternativ:

- You have forgotten the phone number.
- Out of habit, you call your favorite pizza place (whose number you have memorized), forgetting you wanted to try the new place.
- You remember the phone number, so you call and order.
- You think you probably remember the number and try calling, and you are correct.

Totalpoäng: 1

23 The strategy of maintenance rehearsal involves

Välj ett alternativ:

- the repetition of the items to be remembered and the simultaneous consideration of the items' meaning.
- a focus on the associations between the items to be remembered and other thoughts and ideas.
- paying attention to the order of items, independent of their meaning.
- the repetition of the items to be remembered, with little attention paid to what the items mean.

Totalpoäng: 1

24 As a general rule, the intention to learn

Välj ett alternativ:

- leads all people to adopt the same memory strategies.
- usually leads to worse learning than incidental learning.
- has no direct effect on learning.
- has a direct effect on learning.

Totalpoäng: 1

25 A student wishes to memorize an essay so that he will be able to recall the content later. Which of the following is likely to be LEAST helpful to him?

Välj ett alternativ:

- making certain that he understands the argument contained within the essay
- trying to construct a paraphrase of the essay's content
- thinking about why the essay is organized in the way that it is
- repeatedly reading the essay aloud

Totalpoäng: 1

i

Acquisition and retrieval

26 In a lexical decision task, a researcher finds no effect of priming. Which of the following statements is a plausible explanation for this?

Välj ett alternativ:

- The researcher neglected to tell the participants that some of the test words had been recently encountered.
- Some of the test words were high in frequency, but others were quite low in frequency.
- When the priming words were first presented, participants failed to pay attention to the meaning of the words.
- The researcher had waited too long after the exposure that should have produced the priming, and so the implicit memory had faded.

Totalpoäng: 1

27 If you perceive a stimulus and then later perceive the same stimulus again, you are likely to perceive the stimulus more quickly and more easily the second time. This benefit can be described as a(n)

Välj ett alternativ:

- explicit memory.
- recognition memory.
- increase in processing fluency.
- context-dependent memory.

Totalpoäng: 1

28 In many circumstances, participants correctly recognize that a stimulus is familiar, but they are mistaken in their beliefs about where and when they encountered the stimulus. This error is referred to as

Välj ett alternativ:

- source confusion.
- false identification.
- amnesia.
- origin error.

Totalpoäng: 1

29 A friend of yours has recently grown a beard. When you encounter him, you realize at once that something about his face has changed, but you are not certain what has changed. We can conclude from this that

Välj ett alternativ:

- you are being influenced by the fact that there are fewer men with beards than men without beards.
- you detected the decrease in fluency in your recognition of your friend's face.
- your memory of your friend's face is influenced by context-dependent learning.
- you are displaying an instance of source amnesia.

Totalpoäng: 1

- 30** The patient H.M. had much of his hippocampus removed to alleviate seizures. An unfortunate side effect was impaired explicit memory, even though later testing revealed that his implicit memory was spared. This result provides one half of a double dissociation. In order to complete the double dissociation, which of the following patients would need to be found?

Välj ett alternativ:

- a patient with explicit memory intact and a damaged hippocampus
- a patient with intact implicit memory and intact explicit memory
- a patient with intact explicit memory and impaired implicit memory
- a patient with an intact hippocampus and explicit memory deficits

Totalpoäng: 1

i

Remembering complex events

- 31** What are the necessary circumstances to produce false memories in research participants?

Välj ett alternativ:

- It is not possible to produce completely false memories in participants under any circumstances.
- It would require trauma too severe to be ethically allowable.
- It would require a few brief interviews.
- It would require highly suggestible participants and repeated leading questions.

Totalpoäng: 1

32 After Maria witnessed a hit-and-run car accident, a police officer asked her, "Did you get a good look at the driver's glasses as he drove by you?" Based on the results of many studies, we expect that if Maria is asked about the driver again a day later, she will be

Välj ett alternativ:

- able to recall virtually no accurate details about the visual aspects of the event.
- likely to have completely repressed the entire memory.
- likely to recall that the driver was wearing glasses even if he was not.
- likely to have a more accurate memory than she did immediately after the accident because her memories had consolidated overnight while she slept.

Totalpoäng: 1

33 An eyewitness to a crime is quite confident that his memory of the crime is correct. In evaluating the eyewitness's testimony, the jury should note that

Välj ett alternativ:

- eyewitness memories are incorrect as often as they are correct.
- eyewitnesses tend to assert that they are confident only when their memories are reasonably accurate overall.
- memory for the generalities of an event is highly correlated with confidence, but memory for detail is unrelated to confidence.
- memory confidence is sometimes a poor indicator of memory accuracy.

Totalpoäng: 1

34 A great deal of forgetting may be caused by an inability (perhaps temporary) to locate target information that is stored in memory. This sort of forgetting is called

Välj ett alternativ:

- retrieval failure.
- state dependency.
- repression.
- interference.

Totalpoäng: 1

35 Lexi is describing a movie she recently saw. When it comes time to name the actors, she draws a blank and utters, "Ugh, I know his name, and it starts with a 'G.' He has been in a bunch of stuff lately. Why can't I think of it?" Lexi is experiencing

Välj ett alternativ:

- episodic drop-out.
- source confusion.
- retrograde amnesia.
- tip-of-the-tongue phenomenon.

Totalpoäng: 1

i
Concepts and generic knowledge

- 36** In one procedure, participants were asked to judge which was a “better” even number, 4 or 18. The participants

Välj ett alternativ:

- offered judgments that show that well-defined categories do not show the graded-membership pattern.
- regarded this task as absurd, and so they disagreed with each other about the “correct” answer.
- made the judgment in a fashion that implied a graded-membership pattern for the category “even number.”
- regarded all of the even numbers as being “equivalently even.”

Totalpoäng: 1

- 37** A lemon that has been painted red, white, and blue and then run over by a car is still likely to be categorized as a lemon. Which of the following is NOT relevant to why this might be?

Välj ett alternativ:

- If it grew on a lemon tree, it will be considered a lemon.
- Cause-and-effect relationships influence how we think about what an object is and how it is categorized.
- Superficial things like color do not play a role in categorization.
- The essential properties for being a lemon are still there.

Totalpoäng: 1

38 Informal, explanatory “theories” seem to play an important role in our conceptual knowledge. Which of the following statements about the theories involved in conceptual knowledge is FALSE?

Välj ett alternativ:

- They often allow us to understand any new facts that we encounter about an object or category.
- They are usually as precise as most scientific theories.
- They provide a knowledge base that we can rely on when thinking about an object, event, or category.
- They play a part in determining how easily we learn new concepts.

Totalpoäng: 1

39 Collins and Quillian (1969) suggest that information about mental categories is organized

Välj ett alternativ:

- in vertical patterns.
- through basic-level information.
- in a hierarchy.
- through a distributed representation.

Totalpoäng: 1

40 When compared to the statement “A canary is an animal,” the reaction time for “A bird is an animal” will be

Välj ett alternativ:

- slower.
- equal.
- unknown; there is not enough information to make a decision.
- faster.

Totalpoäng: 1

i

Visual knowledge

41 In a study by Segal and Fusella, participants were asked to visualize one stimulus while attempting to detect a different, rather faint, signal that was either visual or auditory in nature. The data indicate that the activity of visualization

Välj ett alternativ:

- had no impact on the detection of the signal.
- served to prime the visual system and the auditory system, promoting the detection of both signals.
- disrupted the detection of a visual signal but had less impact on the detection of an auditory signal.
- served as a general distracter, disrupting the detection of either a visual or an auditory signal.

Totalpoäng: 1

42 _____ imagery is associated with how things look, while _____ imagery is associated with an abstract form or arrangement.

Välj ett alternativ:

- Spatial; visual
- Spatial; eidetic
- Visual; spatial
- Sensory; perceptual

Totalpoäng: 1

43 Hank seems to have eidetic imagery. This means that after viewing a picture for a short amount of time, he will

Välj ett alternativ:

- use mnemonic techniques to describe the gist of the image.
- be able to describe many tiny details in the picture, as if he were still viewing the picture.
- not be able to remember the image at all.
- be able to describe the spatial layout of the objects shown in the picture.

Totalpoäng: 1

- 44** Homer, Lisa, and Moe are asked to remember pairs of words. Homer tries to accomplish this task by rehearsing the words over and over again. Lisa decides to create a narrative combining the words. Finally, Moe decides to imagine the objects interacting in some way. Who is likely to have the WORST memory for the words?

Välj ett alternativ:

- Homer
- Moe
- They will remember them equally well.
- Lisa

Totalpoäng: 1

- 45** In memorizing new material, the pattern of “dual coding” refers to

Välj ett alternativ:

- the strategy of encoding the material from two separate visual perspectives.
- the process of encoding the material on two separate occasions.
- steps that lead to both a verbal memory and a visual memory.
- the formation of a mental image in which the target item is in two separate relationships with its surrounding context.

Totalpoäng: 1

i

Problem solving and creativity

46 In general, a training procedure will promote subsequent analogy use if the procedure

Välj ett alternativ:

- encourages participants to pay attention to the training problem's deep structure.
- teaches the participants general principles about how analogies function.
- focuses on the specific wording used to describe the problem.
- helps participants to remember the exact formulation of the training problems.

Totalpoäng: 1

47 Which of the following is one reason why a creative person might be better able to problem-solve than a less creative person?

Välj ett alternativ:

- Creative people almost always "think outside of the box."
- Creative people are more likely to step away from the problem and let their mind wander.
- Creative people experience "Aha!" moments more often than less creative people.
- Creative people tend to be experts in their respective domains.

Totalpoäng: 1

48 Experts have an advantage in problem solving and remembering certain information (like the position of chess pieces) for all of the following reasons EXCEPT that they

Välj ett alternativ:

- avoid getting bogged down in the details by organizing the information.
- create higher-order units that have a purpose.
- think of units that can be used to set subgoals.
- are more likely to try to use heuristics to problem-solve than novices.

Totalpoäng: 1

49 _____ is an ability to think about concepts/ideas in a new way. _____ is an ability to see ways in which seemingly different concepts/ideas might be related.

Välj ett alternativ:

- Convergent thinking; Divergent thinking
- Creativity; Convergent thinking
- Divergent thinking; Convergent thinking
- Illumination; Mapping

Totalpoäng: 1

50 According to the course textbook, current research indicates that creative problem solving

Välj ett alternativ:

- requires unconscious work that goes on after one has consciously put the problem to the side.
- seems to draw on heuristics and analogies in the same way that ordinary problem solving does.
- draws on mental processes that are distinct from the processes relevant to more ordinary problem solving.
- can be interrupted by divergent thinking.

Totalpoäng: 1