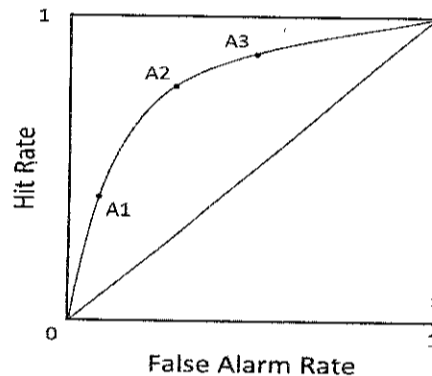


壹、選擇題(每題僅有一個正確或最恰當的答案，每題兩分，共計 50 分)

1. The following graph represents the receiver operating characteristics (ROC) curves of three conditions (A1, A2, and A3) from the perspective of signal-detection theory (SDT), which statement below best describes them:

- (a) In terms of hit rate (HR),  $A1 > A2 > A3$ ;
- (b) In terms of false alarm (FA),  $A1 > A2 > A3$ ;
- (c) In terms of perceptual sensitivity ( $d'$ ),  $A3 > A2 > A1$ ;
- (d) In terms of response criterion ( $\beta$ ),  $A1 > A2 > A3$ ;



2. In studying hemispheric lateralization, split-brain patients have played an important role in our understanding of how the two hemispheres may be in charge of different mental functions. In one experiment, a researcher flashed the word "cup" briefly to the left visual field (LVF) of a split-brain patient, and found that the patient
- (a) correctly retrieved the object ("cup") with his left hand but cannot name the object
  - (b) correctly retrieved the object ("cup") with his right hand and can name the object
  - (c) cannot retrieve the object ("cup") even though he was able to name the object
  - (d) cannot retrieve the object ("cup") and cannot name the object
3. In operant (or instrumental) conditioning, the schedule of reinforcement plays an important role in shaping our behaviors. The so-called "scallop" effect is most likely observed with which schedule?
- (a) fixed-ratio
  - (b) variable-ratio
  - (c) fixed-interval
  - (d) variable-ratio
4. The effect of mental rotation has been used to support the existence of visual imagery. In Shepard & Metzler's (1971) classic study, they asked participants to judge whether two block-like objects were identical to or mirror-image of each other. They found that the reaction time (RT) to make that judgment would monotonically increase
- (a) as a function of angular disparity between the two objects up to  $90^\circ$  and then decrease
  - (b) as a function of angular disparity between the two objects up to  $180^\circ$  and then decrease

- (c) as a function of angular disparity between the two objects up to  $270^{\circ}$  and then decrease
- (d) as a function of angular disparity between the two objects up to  $360^{\circ}$  and then decrease
5. Shaomi is an eight-month-old infant who likes to play with toys. If you put an interesting toy in front of him, he will actively reach out and try to grab it. However, if you then put an opaque (nontransparent) screen between him and the toy, according to Piaget's concept of object permanence concept, Shaomi most likely would
- (a) continue to find the toy behind the screen
- (b) crawl to another place in the room to find the toy
- (c) get very upset and start crying
- (d) stop his reaching behavior as if the toy has disappeared or never existed
6. According to Lawrence Kohlberg, moral judgment develops in three levels of six stages, which statement below is a correct characterization of his conception:
- (a) Stage 1 of Level I: reward orientation
- (b) Stage 3 of Level II: authority orientation
- (c) Stage 4 of Level II: Good-boy/good-girl orientation
- (d) Stage 5 of Level III: Social-contract orientation
7. Biofeedback is the interesting phenomenon where we can control and/or alter of internal metabolic processes such as heart rate with the help of external feedback (e.g., seeing EKG on a display screen with beeps to indicate changes). It is also intriguing in breaking away with the traditional view of distinguishing different types of conditioning. The traditional view has been \_\_\_\_\_
- (a) classical conditioning can only work with behaviors under voluntary controls
- (b) operating conditioning can only work with behaviors that are involuntary (i.e., under the control of autonomic nerve system)
- (c) classical conditioning can only work with behaviors that are involuntary (i.e., under the control of autonomic nerve system)
- (d) operant conditioning can work with all kinds of behaviors, including those that are under voluntary control and those that are not.
8. An infant's tendency to seek closeness to particular people and to feel more secure in their presence is called attachment. If an infant seeks to interact with a caretaker who returns from an absence, that would indicate the infant is:
- (a) disorganized in attachment
- (b) insecurely attached
- (c) anxiously attached
- (d) securely attached
9. Luminance (L) is the product of illumination (I) and reflectance (R) (i.e.,  $L = I \times R$ ). In lightness perception, it is important to make the distinction whether the difference in luminance (L) was due to the presence of an illumination edge or a reflectance edge. Which condition described below may cause

- us to confuse between the two types of edge?
- (a) Too much illumination under the bright sunshine
  - (b) Looking (peeking) at an edge in 3D space through a small hole with only one eye
  - (c) Use one color on one side of the edge and another color on the other side
  - (d) Looking at an edge upside down rather than with the normal upright view
10. In Sperling's (1960) well-known experiment on iconic memory (or very short-term visual memory), he compared results from the whole-report and partial-report procedures. Which statement below is correct?
- (a) Sperling found capacity of iconic memory was larger when estimated with the whole-report procedure
  - (b) Sperling found capacity of iconic memory was larger when estimated with the partial-report procedure
  - (c) The whole-report procedure entails using a post-display cue to instruct participants how to report the content of stimulus display
  - (d) Iconic memory estimated by the partial-report procedure can last up to 2 seconds
11. \_\_\_\_\_ memory refers to the kind of memory manifested in recall and recognition, when we consciously recollect the past. \_\_\_\_\_ memory refers to the kind of memory that manifests itself as an improvement on some perceptual, motor, or cognitive tasks, with no conscious recollection of the experiences that led to the improvement.
- (a) Procedure, declarative,
  - (b) Veridical, nonveridical
  - (c) Explicit, implicit
  - (d) Short-term, long-term
12. A \_\_\_\_\_ is a category of speech sounds. Every language has its own set of phonemes – with different sets for different languages – and rules for combining them into words.
- (a) morpheme
  - (b) phoneme
  - (c) grammar
  - (d) semantics
13. In the 19<sup>th</sup> century, two famous physicians, Paul Broca from France and Carl Wernicke from Germany, discovered patients with two distinct types of language disorder, called aphasia. Which statement below is correct?
- (a) Patients with Broca aphasia often spoke with “word salads” and can speak fluently but unable to make much sense
  - (b) Patients with Wernicke aphasia required a great deal effort to utter even a simple word
  - (c) Patients with Broca aphasia tend to have brain damages close to motor and pre-motor areas of the cortex in the left hemisphere
  - (d) Patient with Wernicke aphasia tend to have brain damages in the occipital lobe of the cortex in the

- right hemisphere
14. Modern neuroscience took off in the late 19<sup>th</sup> century with \_\_\_\_\_ using the \_\_\_\_\_ method developed by \_\_\_\_\_ to discover the entire cell body of neurons under microscope.
- (a) Santiago Ramón y Cajal, silver staining, Camillo Golgi
  - (b) Francis Crick, x-ray differentiation, James Watson
  - (c) David Hubel, single-cell recording, Tersten Wiesel
  - (d) Charles Darwin, action unit analysis, Paul Ekman
15. There are two blind spots in each of our two eyes. The reason(s) that we don't sense the existence of blind spot even though there are no visual receptors in them is because:
- (a) blind spots are located in the non-corresponding locations on the retina so that one can compensate for the other and vice versa;
  - (b) we can always move our eyes around by making eye movements so that almost nothing will be projected to the blind spots;
  - (c) the ganglion cells that exit through the blind spots can replace the function of receptors
  - (d) the finding of blind spot was fundamentally incorrect – there is actually no blind spot in our eyes.
16. The pattern of cerebral asymmetry refers to the pattern of responding in which the right prefrontal cortex shows \_\_\_\_\_ and the left prefrontal cortex shows \_\_\_\_\_.
- (a) greater activation with positive affect; greater activation with negative affect
  - (b) lesser activation with positive affect; lesser activation with negative affect
  - (c) greater activation with negative affect; greater activation with positive affect
  - (d) lesser activation with negative affect; lesser activation with positive affect
17. Researchers conduct an experiment in which male participants are given a drug that makes them feel extremely happy. Participants in Group A are told that they will feel this way from the start. Participants in Group B are not told about the effects of the drug. After the drug has taken effect, an attractive woman enters the room. According to the Schachter-Singer two-factor theory, the group of participants is less likely to feel attracted to the woman, and why?
- (a) Group A, because they were already happy when they came to the experiment.
  - (b) Group A, because they expected positive feelings from the drug.
  - (c) Group B, because they identified the positive feelings later.
  - (d) Group B, because they were not told about the effects of the drug.
18. An evolutionary explanation of mate preferences might suggest that women seek men of high status because
- (a) they confer the prestige of their status on their partners
  - (b) they have more resources with which to support their families
  - (c) their high status implies good genetic potential for intelligence
  - (d) their high status implies good adaptive skills
19. In making causal attributions, people from Eastern cultures differ from those in Western

- in that they:
- (a) use more information in making attributions and are less individualistic in their attributions
  - (b) are less holistic in their attributions
  - (c) are more likely to consider dispositional factors
  - (d) use more information in making attributions and are more likely to consider situational factors
20. In light of the results of the Milgram studies, which of the following soldiers would you have the least trouble carrying out his orders?
- (a) a soldier shooting an enemy soldier at a distance of 10 feet
  - (b) a soldier shooting enemy soldiers from inside a tank
  - (c) a marine strangling an enemy sailor in an amphibious landing
  - (d) a pilot dropping a bomb on an enemy airbase
21. Based on Freud's psychosexual stage theory, which of the following would you most expect to hear a 5-year-old boy say to his mother?
- (a) "How come none of the girls at school like me?"
  - (b) "You are soooo beautiful!"
  - (c) "I wish you would go away so I could spend more time with Daddy."
  - (d) "You are mean. I don't like you!"
22. Walter Mischel has argued that trait theories have difficulty predicting behavior because:
- (a) the typical trait measures have low reliability
  - (b) our behavior is more responsive to situational variables than we assume
  - (c) the traits thus far identified relate to conscious rather than unconscious motives
  - (d) they depend on self-report rather than on objective measures of behavior
23. How does infant temperament relate to adult personality?
- (a) Infant temperament affects the general structure of personality and can predict specific behavior patterns.
  - (b) Temperament changes so much over early development that no relationships have been documented.
  - (c) Infant temperament correlates with both the general structure of personality and specific behavioral patterns shown by adults.
  - (d) Infant temperament predicts negative but not positive behaviors.
24. According to sociometer theory, self-esteem is important because it:
- (a) monitors social acceptance and rejection
  - (b) monitors discrepancies between internal self-evaluation and external self-concept
  - (c) monitors the good and bad behaviors of other people in one's social group

- (d) protects one against social rejection
25. Joellie is a competent woman with high self-esteem. She was given a big project at work sure that she could complete it on time. Months later, she was not finished with the project and began to blame the project manager. "Why did you give me such a hard task? It's not my fault. It isn't finished. The project management was terrible, and the project was doomed to fail from the beginning." Joellie is showing evidence of:
- (a) a self-serving bias                      (c) self-sabotage  
(b) self-esteem disengagement      (d) a self-deprecating personality style

貳、問答題 (必要時，請儘可能舉例或舉實際的研究或實驗以佐證你(妳)的答案，每題 10，共計 50 分)

1. 在高階視覺(high-level vision)或視覺辨識(visual recognition)的範疇中，研究者可以依據研究的刺激對象分成字詞辨識(word recognition)、物體辨識(object recognition)及臉孔辨識(face recognition)等領域。請就其中的兩個領域，各自(一)舉出具代表性的理論(包含表徵與處理的特性)，(二)就理論以及實徵研究的層次比較兩個領域辨識歷程的異同。
2. 在發展心理學的研究中，古典的階段理論(stage theory)與較近期的微觀成因方法與分析(microgenetic method and analysis)代表兩種探究與解釋發展成因與歷程極為不同的取向。請試以認知發展(或其中特定的議題)為例，說明這兩種取向的內涵，並比較二者的異同。
3. 神經系統的基本元件為神經細胞(neurons)，而神經訊號的傳遞(neuronal signaling)則是神經細胞彼此溝通的關鍵歷程。神經訊號的傳遞有賴局部(短距離)的靜態歷程以及長距離的動態歷程共同達成。請以動作電位(action potentials, APs)形成、傳遞(極化變化)乃至於釋放傳導介質等過程，說明前述靜態與動態歷程在神經傳導的角色。(提示：在你(妳)的回答中，至少應包含休息電位、去極化、過極化、離子交換等重要概念)
4. 近年來，青年失業的議題已成為台灣重要的社會議題之一。有人認為這對青年朋友是個危機，但也有人認為這是個轉機。請你從人本論與行為論的立場來論述青年失業對青年朋友可能的影響。
5. 同性婚姻合法化的議題引起了台灣社會各界人士熱烈的討論，支持與反對者各有立場，針鋒相對，互不相讓。請從態度改變或社會影響的理論或研究成果中，選擇一個理論或研究來說明你認為彼此的立場是可以被改變的，或者化解彼此的對立是可能的，再選擇一個理論或研究來說明彼此的對立可能無法被化解或者彼此的觀點可能是無法被改變。