

一、選擇題 75 分（單選題，每題 3 分，請將答案填入答案卷【選擇題作答區】）

1. According to John Locke, which of the following is true?
 - A. Children are born as noble savages
 - B. Parenting is not important to shape children's characters
 - C. He regarded development as "continuous"
 - D. He adopted the "nature" view of development
 - E. He supported physical punishment

2. According to "Dynamic systems perspective", which of the following is true?
 - A. Development involves an increase in learned behavior
 - B. Children exercise their innate drive to discover rules in their environment
 - C. Microsystem is one of the "dynamic systems"
 - D. Developmental stages are assumed to be universal
 - E. The child's mind, body, and physical and social worlds form an integrated system that guides child's development.

3. If you would like to study whether improvement in parents' depression is linked with changes in their children's depressive symptoms and functioning, which of the following research design is most appropriate?
 - A. Structured interview
 - B. Longitudinal design
 - C. Clinical method
 - D. Sequential design
 - E. Microgenetic design

4. Which of the following is true about speech perception development in infancy?
 - A. Newborns are able to distinguish /ba/ vs. /ga/ sounds
 - B. Three-month-old infants have an impressive statistical learning capacity.
 - C. Six-month-old infants perform the statistical learning ability for both speech and visual stimuli
 - D. Between 10 and 12 months, infants start to screen out sounds not used in their native tongue
 - E. Around 3 to 5 months, infants begin to divide speech stream into wordlike units.

5. Based on Piaget's cognitive development theory, which of the following is true?
 - A. Four-month-old infants begin to master object permanence
 - B. Schemes do not adapt through the circular reaction
 - C. Four-year-old children are capable of operations
 - D. Between 10 and 12 months, infants can engage in analogical problem solving
 - E. Five-year-old children have trouble with dual representation

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6. Studies support the “Core knowledge perceptive” show that:
- Infants begin life with a domain-general knowledge system
 - “Mathematic knowledge” is one of the core domains.
 - In the “violation-of-expectation” method, infants look longer at the “expected event” than the “unexpected event”.
 - One-month-old infants seem to recognize that one solid object cannot move through another solid object.
 - Five-month-old infants are capable of performing simple addition: $1+1=2$
7. Which of the following studies show the “metacognition” development in childhood?
- Three- and 4-year-olds conclude that mental activity stops while people wait or read books.
 - By age 4, children search for a lost object in a play yard systematically
 - Preschoolers perform better on the verbatim than on the gist memory test; for the second graders, the reverse is true.
 - The child chess experts recalled more on the chess task than adult non-experts.
 - Five-year-old children can switch the basis of card sorting, but younger children persist in sorting in just one way.
8. Which of the following mechanism best describe how children learn grammar of their native language?
- syntactic bootstrapping
 - fast-mapping
 - Children learn object words (i.e., nouns) more than action words (i.e., verbs)
 - Children group words with “agent qualities” as subjects and words with “action qualities” as verbs.
 - Imitating adult’s sentences is the most efficient way for children to learn grammar.
9. Which of the followings is best explained by teratogens?
- Down Syndrome
 - Klinefelter Syndrome
 - Attention Deficit Hyperactivity Disorder (ADHD)
 - Pervasive Developmental Disorders (PDDs)
 - Fetal Alcohol Spectrum Disorder (FASD)
10. According to Erik Erikson, which of the followings is the necessary basis for the healthy development of identity achievement?
- Diffusion
 - Industry
 - Integrity
 - Generativity
 - Forclosure

11. Which of the followings is the way that developmental psychologists would typically use to examine a toddler's self-recognition?
- A. Ask the child what's his/her name and see if he/she can correctly answer the question.
 - B. Show the child a picture of himself/herself and see if he/she can recognize the person in the picture.
 - C. Surreptitiously place a sticker on the child's forehead and see if he/she would take it off while standing in front of a mirror.
 - D. Surreptitiously call the child's name from his/her behind and see if the child would turn his/her head.
 - E. Surreptitiously present a mirror in front of the child and see if the child would stare at (and even smile to) the mirror.
12. In a still-face paradigm,
- A. a toddler is asked to hold a facial expression still and the total duration is recorded. It is a way for developmental psychologists to examine the individual differences of toddlers' effortful control.
 - B. a toddler is asked to hold a facial expression still and the total duration is recorded.. It is a way for developmental psychologists to examine the individual differences of toddlers' temperamental persistence.
 - C. an infant is exposed to a situation that an experimenter in front of him/her is holding an unreactive facial expression. It is a way for developmental psychologists to test the individual differences of stranger anxiety.
 - D. an infant is exposed to a situation that the mother in front of him/her is holding an unreactive facial expression. It is a way for developmental psychologists to test the early capacity of social interaction.
 - E. an infant is exposed to a situation that the mother in front of him/her is holding an unreactive facial expression. It is a way for developmental psychologists to test the early capacity of social referencing.
13. Which of the following statements of infant REM sleep is the most true? (3%)
- A. REM ensures that the whole body is fully oxygenated.
 - B. During REM, the infant's body is almost motionless, and heart rate, breathing, and brain-wave activity are slow and regular.
 - C. REM sleep accounts for 20 percent of the newborn baby's sleep time.
 - D. The percentage of REM sleep is less in preterm babies.
 - E. Researchers believe that the stimulation of REM sleep is vital for growth of the central nervous system.
14. Which is a function of memory?
- A. inference
 - B. relating prior knowledge to new events
 - C. making relevant knowledge available
 - D. Storing and retrieving facts
 - E. all of the above

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15. Which statement best describes the relation between encoding and retrieval?
- A. Retrieval will always improve when more information is provided.
 - B. Retrieval is always better for recognition than for recall.
 - C. Retrieval is better when more of the original encoding context is supplied.
 - D. Retrieval is improved if encoding takes place at a shallow rather than deep level.
16. The average reaction time to verify the sentence "A robin is a bird" is shorter than the average reaction time to the sentence "A chicken is a bird." The result is an example of
- A. a frequency effect
 - B. a typicality effect
 - C. episodic memory
 - D. a hierarchical effect
17. Which of the following statements is true about the relationship between parallel distributed processing (PDP) models of memory and the brain?
- A. PDP models use the computational processes of the brain as a metaphor
 - B. PDP models attempt to model the structural properties of the brain
 - C. PDP models attempt to provide a psychological description of neural functioning.
 - D. PDP models attempt to model the computational processes of the brain
18. Reconstructive memory refers to
- A. having false memories implanted by others.
 - B. integrating multiple sources of information in remembering
 - C. elaborating on memories to make them more interesting
 - D. creating memories in terms of your own desires
19. According to Chomsky, two different interpretations of the same ambiguous sentence have
- A. different surface structures and different deep structures.
 - B. the same surface structures and the same deep structures.
 - C. different surface structures and the same deep structures.
 - D. the same surface structures and different deep structures.
20. Our trouble with understanding garden-path sentences leads to the conclusion that
- A. phrase structures are superior to transformational grammars for describing language.
 - B. we do not follow the minimal attachment strategy.
 - C. language is interpreted incrementally.
 - D. it is easier to state the rules of a language than to understand the sentences of the language.

21. Which of the following are implications of the probabilistic view of concepts?
- A. people implicitly compute the likelihood that an exemplar is a member of a concept
 - B. exemplars can be differentially good members of a concept
 - C. category members have common features
 - D. A and B
22. Philip is a physics professor and Deny is his student. In solving a series of problems, Philip is more likely to group them according to _____ and Deny is more likely to group them according to _____.
- A. the content of the problem; the laws of physics
 - B. the laws of physics; the content of the problem
 - C. visual representations; verbal representations
 - D. verbal representations; visual representations
23. Which statement below does not describe the information processing approach appropriately?
- A. Assume mental process exist.
 - B. Human are active information processors.
 - C. Usually assume the processes in various stages are independent.
 - D. It focuses on the structure rather than the function of human brains.
 - E. None of the above
24. In Kamin's blocking experiment, animals first were exposed to many pairings of a tone with a shock. Next they were presented many times with a tone, a light and a shock. In later test trials, Kamin found that
- A. Animals did not show a fear response to the tone.
 - B. Animals did not show a fear response to the light.
 - C. Animals showed equal fear to the tone and the light.
 - D. Animals showed less fear response to the tone than the light.
25. Inductive reasoning is always _____.
- A. probabilistic
 - B. valid
 - C. certain
 - D. deterministic
 - E. incorrect

二、問答題 25%

1. (14%). Psychological research has shown that people often do not follow a rational model or a normative rule in making decisions or reasoning. Please describe two empirical findings in human reasoning or decision making to illustrate the above-mentioned discrepancy (be specific about which model or rule you are considering, 8 points). Based on these findings, what we could or could not say about human rationality? (6 points)

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2. (6%) What is Robert Siegler's "Model of strategy choice" on cognitive development? Please provide the studies that support this theory and also discuss the limitations.

3. (5%) Read the following excerpt from an article published on January 8, 2011 in the Wall Street Journal and apply you knowledge about the concepts of implicit theory of intelligence, goal orientation and achievement-related attribution to write a short essay to comment on the article. (*Note.* The author, Amy Chua, is a Chinese American mother. Her husband's name is Jed and her two daughters' names are Sophia and LuLu.)

Why Chinese Mothers Are Superior?

Can a regimen of no playdates, no TV, no computer games and hours of music practice create happy kids? And what happens when they fight back?

By AMY CHUA

.....What Chinese parents understand is that nothing is fun until you're good at it. To get good at anything you have to work, and children on their own never want to work, which is why it is crucial to override their preferences. This often requires fortitude on the part of the parents because the child will resist; things are always hardest at the beginning, which is where Western parents tend to give up. But if done properly, the Chinese strategy produces a virtuous circle. Tenacious practice, practice, practice is crucial for excellence; rote repetition is underrated in America. Once a child starts to excel at something—whether it's math, piano, pitching or ballet—he or she gets praise, admiration and satisfaction. This builds confidence and makes the once not-fun activity fun. This in turn makes it easier for the parent to get the child to work even more.

.....Here's a story in favor of coercion, Chinese-style. Lulu was about 7, still playing two instruments, and working on a piano piece called "The Little White Donkey" by the French composer Jacques Ibert. The piece is really cute—you can just imagine a little donkey ambling along a country road with its master—but it's also incredibly difficult for young players because the two hands have to keep schizophrenically different rhythms.

Lulu couldn't do it. We worked on it nonstop for a week, drilling each of her hands separately, over and over. But whenever we tried putting the hands together, one always morphed into the other, and everything fell apart. Finally, the day before her lesson, Lulu announced in exasperation that she was giving up and stomped off.

"Get back to the piano now," I ordered.

"You can't make me."

"Oh yes, I can."

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Back at the piano, Lulu made me pay. She punched, thrashed and kicked. She grabbed the music score and tore it to shreds. I taped the score back together and encased it in a plastic shield so that it could never be destroyed again. Then I hauled Lulu's dollhouse to the car and told her I'd donate it to the Salvation Army piece by piece if she didn't have "The Little White Donkey" perfect by the next day. When Lulu said, "I thought you were going to the Salvation Army, why are you still here?" I threatened her with no lunch, no dinner, no Christmas or Hanukkah presents, no birthday parties for two, three, four years. When she still kept playing it wrong, I told her she was purposely working herself into a frenzy because she was secretly afraid she couldn't do it. I told her to stop being lazy, cowardly, self-indulgent and pathetic.

Jed took me aside. He told me to stop insulting Lulu—which I wasn't even doing, I was just motivating her—and that he didn't think threatening Lulu was helpful. Also, he said, maybe Lulu really just couldn't do the technique—perhaps she didn't have the coordination yet—had I considered that possibility?

"You just don't believe in her," I accused.

"That's ridiculous," Jed said scornfully. "Of course I do."

"Sophia could play the piece when she was this age."

"But Lulu and Sophia are different people," Jed pointed out.

"Oh no, not this," I said, rolling my eyes. "Everyone is special in their special own way," I mimicked sarcastically. "Even losers are special in their own special way. Well don't worry, you don't have to lift a finger. I'm willing to put in as long as it takes, and I'm happy to be the one hated. And you can be the one they adore because you make them pancakes and take them to Yankees games."

I rolled up my sleeves and went back to Lulu. I used every weapon and tactic I could think of. We worked right through dinner into the night, and I wouldn't let Lulu get up, not for water, not even to go to the bathroom. The house became a war zone, and I lost my voice yelling, but still there seemed to be only negative progress, and even I began to have doubts.

Then, out of the blue, Lulu did it. Her hands suddenly came together—her right and left hands each doing their own imperturbable thing—just like that. Lulu realized it the same time I did. I held my breath. She tried it tentatively again. Then she played it more confidently and faster, and still the rhythm held. A moment later, she was beaming.

"Mommy, look—it's easy!" After that, she wanted to play the piece over and over and wouldn't leave the piano. That night, she came to sleep in my bed, and we snuggled and hugged, cracking each other up. When she performed "The Little White Donkey" at a recital a few weeks later, parents came up to me and said, "What a perfect piece for Lulu—it's so spunky and so her."