

I、文意字彙：下面 1~20 題，每題空格均附有備選答案，請將最適合句意的答案選出來，並按規定作答。(每題 1.5 分，共 30 分)

1. Like fingerprints, each person's DNA is _____, which indicates clearly that everyone's DNA is different.
(A) essential (B) identical (C) complex (D) unique
2. Journal articles should be as _____ as possible; the research must not include his opinions or emotions.
(A) subjective (B) objective (C) protective (D) detective
3. They wanted to drive to Taipei, but because of the rain shower, they never reached their _____.
(A) target (B) origin (C) decoration (D) destination
4. Listless and sleepless are both _____s of depression.
(A) sympathy (B) system (C) symptom (D) synonym
5. The residents of Taiwan will march through the local streets _____ against the Anti-Secession law issued in China.
(A) demonstrating (B) decorating (C) reflecting (D) recreating
6. Every graduate student at the conference was deeply _____ with Dr. Johnson's sharp criticism.
(A) compressed (B) impressed (C) repressed (D) depressed
7. Jennifer got stomach, so her mother _____ me to the local clinic.
(A) took (B) carried (C) fetched (D) paid
8. A cat often _____ its back when in fight or flight situation.
(A) humps (B) jumps (C) lumps (D) dumps
9. It's dangerous to swim in this river. There is a very strong _____ which can carry you away.
(A) current (B) contract (C) curtain (D) curfew
10. That naughty boy is full of _____. You never know what kind of trick he'll play next.
(A) mishap (B) minority (C) mischief (D) minor
11. "Peter goes to church every day...." "Oh? I didn't know he was as _____ as that."
(A) pompous (B) pious (C) sacred (D) sacrifice
12. They don't seem to enforce the fines against littering here. Garbage is _____ all along the highway.
(A) glittered (B) hooked (C) scratched (D) scattered
13. It is taken for granted that a bad habit, once _____, can't be gotten rid of easily.

- (A) required (B) acquired (C) included (D) accumulated
14. Mr. Wallace can not give up smoking because he is _____ to cigarettes.
(A) willing (B) addicted (C) interesting (D) hobby
15. _____ me, there were three other visitors who were also graduate students of the university.
(A) Beside (B) Moreover (C) In addition to (D) As well
16. Our salary is not _____ to support our family, which means that we lead a poor life.
(A) balance (B) modesty (C) adequate (D) suit
17. Nothing can _____ the loss of his friend.
(A) explain (B) compensate for (C) undo (D) retaliate for
18. Learning how to respond to _____ properly takes a long time.
(A) criticism (B) heyday (C) parade (D) skyscraper
19. If you want to succeed, you must _____ what your professor tell you to do.
(A) obey (B) value (C) admire (D) reply to
20. In a formal paper it is _____ to use footnotes each time a source is quoted.
(A) sensible (B) acceptable (C) satisfactory (D) mandatory

II、語法選擇：下面 21~40 題，每題空格均附有備選答案，請將最適合句意的答案選出來，並按規定作答。(每題 1.5 分，共 30 分)

21. Eastern meadowlarks abound in places _____, but eat harmful insects rather than grain.
(A) land is cultivated there (B) there is land cultivated
(C) where land is cultivated (D) where is cultivated land
22. _____ for mathematical precision been more apparent than in the field of computer technology.
(A) The need has nowhere (B) Has nowhere the need
(C) Nowhere has the need (D) The need nowhere has
23. Not until 1868 _____ made the capital of the state of Georgia.
(A) was Atlanta (B) when Atlanta was
(C) Atlanta was (D) was when Atlanta
24. A large portion of the current debate over the implications of the women's liberation movement _____ too charged with emotion to be informative.
(A) is (B) are (C) has been (D) to be

25. The boy's mother was very angry because there _____ books and clothing scattered around the room.
(A) was (B) were (C) has been (D) to be
26. Having studied your report carefully, I am convinced that neither of your solutions _____ correct.
(A) is (B) are (C) has been (D) to be
27. If I _____ enough money then, I would have bought that fancy bike.
(A) have (B) had (C) have had (D) had had
28. It is time that she _____ hard.
(A) study (B) studies (C) should study (D) has studies
29. _____ they had something to eat.
(A) No one would give them food (B) He bought some meat
(C) they wish to (D) It is time
30. I propose that he _____ chairman.
(A) electing (B) elected (C) elects (D) be elected
31. _____ incense is made in powder form or in sticks.
(A) It is usually (B) Usually
(C) Usually it is (D) Usually when
32. _____ theories have been advanced to account for the existence of the moon.
(A) They have many (B) There have been many
(C) Many (D) That many
33. _____ of the use of wool in fabrics as early as 4,000 B.C.
(A) Evidence (B) It is evidence
(C) There is evidence (D) Evidence is
34. Lately, the prices of the high-tech securities run _____ high _____ many experts break their glasses. This situation surprises all the investors on the market.
(A) too; to (B) so; that (C) so; as (D) very; for
35. The purpose of Corporate Finance consists _____ three decisions: long-term investment, long-term Financing, and daily financial operation.
(A) with (B) to (C) upon (D) of
36. It is not easy to be a successful researcher. You have to be equipped with _____ professional knowledge _____ excellent communication skill.
(A) as many; as (B) as well; as
(C) not only; but also (D) rather; than
37. According to the results of the experiment, George's choice is wrong. That is he _____ the other way.
(A) should chose (B) should chosen
(C) should have chosen (D) should had been chosen

38. A: How long does it take to go to the university?

B: _____.

(A) Everyday

(B) Two times

(C) Three minutes

(D) Four kilometers

39. A: How many times have you been to the academic conference?

B: _____.

(A) I first time come to the conference

(B) It's the first time to be here

(C) First time I come to the conference

(D) I come to the conference first time

40. A: Don't you have to go to the university tomorrow?

B: _____.

(A) Yes, I must not

(B) No, I don't

(C) No, I must

(D) Yes, I do

III、請將以下這段英文翻譯為流暢可讀的中文（40分）

Public education in North America was not instituted as a path to equality, yet it has been deeply shaped by that ideal. Critique and struggle have taken up its implicit promise of universality and hence of equal opportunity. Ideal of equality were joined with the social need to generalize culture, knowledge, and skills. Education could be a way for people to become informed citizens, hence capable of true participation in a democratic society, and a means through which injustices and inequality could be rectified by standardizing opportunities to learn and advance.

請注意 每題30分，解釋名詞每項5分。

- 一、教育部近年來推行的九年一貫課程改革，與一些現代教育思潮有密切的關聯。請就您所知而申論之。
- 二、我國高中畢業生所參加的學科能力測驗(簡稱「學測」)與英國的 GCE-A Level 考試、法國的 Baccalauréat、德國的 Abitur 等考試有何相同或相異之處?
- 三、請由知識社會學的觀點，分析國內推行課程統整的可行性與限制性。
- 四、解釋名詞
 1. 人的研究(Man: A Course of Study)
 2. 專業發展學校(professional development schools)

※教育心理學：請一律橫式依序題號逐題書寫

壹、申論題（每題 20 分）

- 一、何謂創意思考(creative thinking)?如何評量?如何提升學生的創意思考能力。
- 二、何謂批判思考(critical thinking)?如何評量?如何提升學生的批判思考能力。
- 三、試從行為主義(Behaviorism)、認知理論(Cognitive theories)、人本主義(Humanistic)和建構主義(Constructivism)之觀點解釋學習動機。
- 四、在教育心理的相關研究領域中,請援引相關的認知或教學心理學理論,分析目前國中教師教學困難與國中學生學習痛苦的原因,並針對九年一貫教改的理念與作法提出建設性的建議。

貳、名詞解釋（每題 5 分）

1. Reciprocal teaching
2. Advance organizer
3. Automaticity theory
4. Deep processing approach vs. surface processing approach

一、選擇題 (每題兩分，共占 20%)

1 一樣本的觀測值為 2, 1, 0, 4, 5, 則其中位數為

- (a) 5
- (b) 4
- (c) 0
- (d) 1
- (e) 2

2 下列敘述中，何者是不良的科學假設？

- (a) 平均來說，男人比女人長壽
- (b) 太陽系的行星，以橢圓方式繞太陽運行
- (c) 所有金屬遇熱膨脹
- (d) 除了地球之外，在宇宙中某個星球的某處存在具有智慧的生物
- (e) 光在不同的介質中，行進速率不同

3、下列有關信度係數的敘述中，那些是正確的

- (a) 甲丁 (b) 乙丙 (c) 甲丙 (d) 乙丁 (e) 甲乙丙

甲：增加測驗的長度，信度亦會增加

乙：樣本能力分配的變異數愈小者，信度係數值愈高

丙：試題難易適中時，所計算出來的信度係數值較小

丁：計分方式愈主觀者，信度係數值愈低

4、四年五班 ($n=30$) 期末考的數學成績平均分數為 62.56，標準差是 6.23，考慮多種因素後，考生每人加 5 分，請問加分後的成績標準差是多少？

- (a) 1.23
- (b) 6.23
- (c) 11.23
- (d) 67.56
- (e) 不能用以上資料判斷

5、下列何者不一定都是抽樣分配？

- (a) t 分配
- (b) 二項分配
- (c) 常態分配
- (d) 卡方分配
- (e) F 分配

- 6、下面何者之敘述是錯誤的？
- (a) 準實驗 (quasi experiment) 實驗者能有系統操作自變項，能控制實驗誤差
 - (b) 準實驗不能隨機分派受試者
 - (c) 準實驗無法系統的將誤差來源完全予以控制
 - (d) 真實驗 (true experiment) 能隨機分派受試者
 - (e) 不能用以上資料判斷
- 7、全國 18 歲至 75 歲之男性當中，身高與體重之相關係數約為 0.4，則
- (a) 較重之男性通常比較矮
 - (b) 如果一男性增重 10 公斤，則他將長高許多
 - (c) 較高之男性通常比較重
 - (d) 如果一男性減重 10 公斤，則他將長高許多
 - (e) 因為數據不足，故不能回答

第 8 至 10 題：針對下列所陳述的三種情況，請指出各需要蒐集哪一種效度：

(a) 內容效度 (b) 預測效度 (c) 同時效度 (d) 建構效度

- 8、測驗編制者新制訂了一套「焦慮評量表」，現要確認這份新量表所測得的特質的確是一般所謂的「焦慮」。
- 9、測驗編制者編制了一份只要花 10 分鐘便能做完的智力測驗，要證明這份測驗所測量的與較昂貴的 Stanford-Binet 測驗所測得的特質相同。
- 10、某一位導師想瞭解這次在她班上期末考不及格的同學，下學期在相關科目的學習是否也會發生困難。

二、解釋名詞 (每題四分，共占 24%)

- 1、outliers
- 2、portfolio
- 3、constructivist paradigm
- 4、halo effect
- 5、coefficient of determination
- 6、Thurstone Scales

三、申論題(第一及第二題各 19 分，第三題 18 分，共占 56%)

- 1、假如你想研究國民小學實施早上上課或下午上課是否對學生的學業成績造成差異？請假設一份實驗，儘量控制變因，寫出簡單計劃書一份，並說明如何回答你的研究問題。

2、試解釋並各舉一例說明下列辭彙之意義：

- 甲、概念(concept)
- 乙、假說(assumption)
- 丙、假設(hypothesis)
- 丁、定律(law)
- 戊、理論(theory)

3、請解釋下表內容及各數字所代表的涵意。

Table 1 Item-analyses data derived from four multiple-choice items

Item	Group	Group Size	Response Alternatives ¹					Total No. Correct (H and L)	Difficulty Index	(H-L)	Discrimination Index
			1	2	3	4	5				
1	High	12	0	<u>11</u>	0	1	0	20	83%	2	+.17
	Low	12	2	<u>9</u>	1	0	0				
2	High	25	2	2	<u>20</u>	1	0	26	52%	14	+.56
	Low	25	5	8	<u>6</u>	2	4				
3	High	16	2	2	8	2	<u>2</u>	6	19%	-2	-.13
	Low	16	4	3	4	1	<u>4</u>				
4	High	30	<u>20</u>	3	2	1	4	28	47%	12	+.40
	Low	30	<u>8</u>	1	9	9	3				

¹ Underlined numbers indicate correct answers.