申論題：每題 25 分，共計 100 分。

1. 請根據學習動機的理論及研究，說明在教學上有那些做法可以提昇學生的內在學習動機。

2. 五歲的皮皮拿著蠟筆對自己說：「我要畫個圓圈。」然後他畫了一個圓，畫好後，他又對自己說：「畫的好漂亮喔！我還要再畫好多個圓圈。」於是他畫了一個又一個的圓圈，邊畫邊說：「大圓圈...小圓圈...好多圓圈喔...」

請分別以皮亞傑（Piaget）和維果茨基（Vygotsky）的觀點，解釋皮皮的行為在認知發展上所代表的意義。

3. 研究顯示，教師使用的認知教學策略有助提昇學生的理解與成就。請任選兩種認知教學策略，說明其內涵，並以實例說明這些策略在教學中如何應用。

4. 評述皮亞傑（Piaget）、柯柏格（Kohlberg）道德發展理論，並說明老師如何促進學生道德發展。
國立中山大學九十二學年度碩士班招生考試試題

科目：教育研究法（含測驗與統計）

教育研究法(含測驗、統計)

注意：本試題採隨機出題，考生不可抄題，作答時請注意試題題號，第一大題選擇題請將選答於答
案紙上來作答，第二、三大題(含題解)請由答題紙之次頁開始依序作答。(於本試題上作答，或未
固定答題者，不予計分)

一、選擇題：(每題 2 分，共 30 分，複選題另註明，其餘皆單選題)

1. 若一統計的差異是否重要？(A) 要否 (B) 要 (C) 不要 (D) 依허 (E) 不可回答

2. 試求此數計算公式信賴區間為 60%±3.9% (B) 60%±4% (C) 60%±24% (D) 60%±2.4% (E) 因此數據不足，故不能回答

3. 一老師為高考學生成績排列，考完後，老師針對每位學生答對及答錯的題數作統計。試問答對題數及答錯題數之相關係數為(A) 1 (B) -0.5 (C) ±1 (D) 1 (E) 因此

4. (可複選) 信賴的可增加研究的可信賴性(Credibility) 方法有：(A) 隨機樣 (B) 三角検定法 (C) 持續觀察法 (D) 同清簡報 (E) 正面個案分析法

5. 預測兩個數達測試，以 Rulon 估算法所求得全測試的信度會較以斯泰法公式所

6. 某次高中學力測驗國文分數與數學分數的相關係數為 0.5，其每一位學生國文分數乘

7. 有關「常模」的敘述，下列何者正確？(A) 選定對象所得的平均分(B) 平均分要達到的

8. 下列五個步作研究步驟，請指出一般研究程序

9. 下列那一項最難下操作定義 (operational definition)

10. 下列那一項是研究方向的目標？(A) 採取可行的研究方程式 (B) 助研究領域

...
11. 使用郵寄問卷的研究方法，最大的缺點是下列何選項？(A)問卷題目難於設計 (B)問卷題目難於分析 (C)所收到的不一定是代表性的樣本 (D)題目的內部一致性欠佳 (E)研究經費較高

12. 對於探索性的研究，以下何種方法為何合適？(A)深度訪談法 (B)文件分析法 (C)焦點團體法 (D)參與觀察法 (E)口述歷史法

13. 下列哪個理論又稱芝加哥學派？(A)事績方法論 (B)象徵互動論 (C)現象學 (D)行動理論 (E)詮釋學

14. 質性研究方法中被認為最接近實證科學的方法為何？(A)實源理論 (B)行動研究 (C)口述歷史法 (D)焦點團體法 (E)參與觀察法

15. 以下何者屬於質性研究的基本特性？(A)通過研究者的眼睛看世界 (B)強調事件發生的脈絡 (C)採用開放的研究策略 (D)重視詳細的描述 (E)以上皆是

二、解釋名詞每題4分，共20分請將下列名詞用中文解釋之

1. ANCOVA
2. Bracketing
3. Ceiling age
4. participant observation
5. intersubjectivity

三、問答題第1、2題各17分，第3大題16分，共50分

1. 試述現代測驗理論( Item Response Theory)？並描述其中所述之不變性(invariance)及不確定性(indeterminacy)。

2. 試例舉並說明五種質性研究的學術傳統。

3. 某電腦公司廣告標題是「用電腦備課交功課的成績比較好」，該公司聲稱，他們的研究得出500位高中的(大專)教師回覆問卷，教師在問卷的項目可選：非常同意，同意，沒意見，不同意，非常不同意。結果，超過50%的樣本同意或非常同意「用電腦備課交功課的成績比較好」這一句話。所以該公司下的結論是「用電腦備課交功課的成績比較好」。你會如何分析？若你針對此結論，你會如何設計控制實驗( Controlled experiment)
一. 詞彙: 請從每題的 (A)-(D) 中選出最適合句意的答案（單選題 10 題，每題 2 分，共 20 分）

1. In the morning he enjoys listening to _____ of music on the radio.
   (A) monitors (B) electronic (C) broadcasts (D) videotapes

2. The astronomer applied his _____ to observe the stars in galaxy.
   (A) periscope (B) kaleidoscope (C) stethoscope (D) telescope

3. It is _____ for all drivers not to carry their licenses with them when driving.
   (A) inexpensive (B) illegal (C) appropriate (D) inconvenient

4. His constant pleas for a new car became so _____ that his father finally got irritated.
   (A) harassing (B) dominant (C) mean (D) pragmatic

5. Considering their differences in academic background, we were surprised that the two scholars' arguments are in _____.
   (A) concrete (B) comfort (C) conflict (D) concert

6. _____ studies lead to an understanding of the human behaviors.
   (A) Anthropological (B) Semantic (C) Psychological (D) Etymological

7. Since I am neither rich nor poor, I am a member of the _____ class.
   (A) blue-collar (B) bourgeois (C) entrepreneur (D) managerial

8. When their business corrupted, they lost all their _____.
   (A) capital (B) fund (C) debt (D) income

   (A) mechanic (B) dietitian (C) physicist (D) programmer

10. Peter is a very cautious and prudent person, so he planned and carried out his project in a very _____ way.
    (A) synchronized (B) sluggish (C) stupid (D) systematic
11. I love her not only for ____ she is, but for ____ I am ____ I am with her.
   (A) what...what...when (B) what...when...what
   (C) when...what...what (D) when...where...what

12. Our time was limited, and the only free moment we had was ____ the following Saturday.
   (A) with (B) in (C) at (D) on

13. Absorb knowledge wherever possible and listen to the opinions of those more experienced
    than yourself, but don't let anyone ____ your thinking for you.
   (A) does (B) to do (C) doing (D) do

14. She was among the hundreds of students ____ to join this occasion.
   (A) invited (B) inviting (C) to invite (D) invites

15. Educators want to know ____ influences classroom management.
   (A) which (B) that (C) what (D) how

16. ____ begun to be aware of the risk of lung cancer associated with excessive exposure to the
    smoke from cigarettes.
   (A) Only in the past decade have smokers
   (B) In the past decade have only smokers
   (C) Only in the past decade smokers
   (D) The only smokers in the past decade

17. While traveling through the Blue Mountain in Sydney, ____.
   (A) the scenes attracted the travelers deeply
   (B) the travelers were awed by the breath-taking scenes
   (C) the travelers attracted the scenes
   (D) the breath-taking scenes attracted the travelers

18. I would have told you the story if you ____ me about it.
   (A) had asked (B) asked (C) have asked (D) ask

19. The US Senate Foreign Relations Committee has approved ________ to
    prompt the Bush administration to work out a plan to secure Taiwan's participation in the
    meeting of the World Health Assembly (WHA) in Geneva.
   (A) and sent to the Senate floor a bill
   (B) and sent to a bill to the Senate floor
   (C) but sent to the Senate floor a bill
   (D) but sent to a bill to the Senate floor
20. While Taiwan ________, the issue has gained urgency this year because of the growing global epidemic of SARS.
   (A) had long sought to participate in the WHA
   (B) has long sought to participate in the WHA
   (C) has long sought participating in the WHA
   (D) had long sought participating in the WHA

   (A) which is the author of the Taiwan WHA legislation,
   (B) is the author of the Taiwan WHA legislation,
   (C) the author of the Taiwan WHA legislation,
   (D) to be the author of the Taiwan WHA legislation.

22. We have urged the World Health Organization and its members ________ to participate.
    including observer status.
   (A) finding appropriate ways for Taiwan
   (B) to find appropriate ways for Taiwan
   (C) to find appropriate ways to Taiwan
   (D) finding appropriate ways to Taiwan

23. In his theory, Howard Gardner always suggested the instruction based on multiple intelligences, ________.
    (A) inspiring both students and teachers
    (B) inspired both students and teachers
    (C) both students and teachers were inspired
    (D) both students and teachers inspired

24. Well known as an outstanding theorist in psychoanalysis, ________.
    (A) we all are pleased to read Sigmund Freud’s books
    (B) these books were written by Sigmund Freud
    (C) Sigmund Freud wrote a lot of books
    (D) it was pleasant to read Sigmund Freud’s books

25. The instructors have had some problems deciding ________.
    (A) when they should return the final papers to the pupils
    (B) the time when the final papers they should return for the pupils
    (C) when to the pupils they shall return the final papers
    (D) when are they going to return to the pupils the final papers
三. 摘要：請將以下兩篇英文簡譯成中文摘要（不需要逐字翻譯）（每題 25 分，共 50 分）

1. Suggests that an efficient teacher attitude is necessary in educating emotionally handicapped adolescents, including the ability to convince students that their problems can be overcome, that every student has some asset on which to build, and that the classroom can be an enjoyable place. Effective teaching is a performing art and can be learned. The teacher must be able to control tension in the classroom; enlist the aid of students; admit mistakes without excuses; use school work as therapy; communicate interest to students; have the strength of character to maintain order, not as the originator of rules of decorum but merely their enforcer; and be prepared for physically dangerous behavior. It is contended that the teacher, administrator, and the university (as a training facility) must all assume some of the responsibility for educating emotionally handicapped adolescents.

2. Adolescents’ supportive relationships with parents, teachers, and peers were examined in relation to motivation at school (school- and class-related interest, academic goal orientations, and social goal pursuit). On the basis of 167 sixth-grade students, relations of perceived support from parents, teachers, and peers to student motivation differed depending on the source of support and motivational outcome: Peer support was a positive predictor of prosocial goal pursuit, teacher support was a positive predictor of both types of interest and of social responsibility goal pursuit, and parent support was a positive predictor of school-related interest and goal orientations. Perceived support from parents and peers also was related to interest in school indirectly by way of negative relations with emotional distress. Pursuit of social responsibility goals and school- and class-related interest in 6th grade partly explained positive relations between social support in 6th grade and classroom grades 1 year later. Continued research on the social origins of classroom motivation in early adolescence is needed.
請注意：申論題每題 20 分，解釋名詞每題 5 分。

一、國民教育階段課程改革倡導課程統整與協同教學，試申論其理論依據及實施要領，並評述其成效與困難。

二、請舉出一種課程評鑑的模式，並說明如何應用這種模式評估學校本位課程的成效。

三、最近我國教育部宣布將把現有大學強制分為四類，請說明此四類大學之特徵，並此種措施有何理論基礎？與 Martin Trow 的高等教育发展模式又有何關係？

四、『身心障礙學生參加各級中等學校登記分發入學或甄選入學者，依各校錄取標準降低百分之二十五錄取』法令，在九十一年度高中職及五專聯合登記分發上造成社會大眾之熱烈議論，教育部為因應此事件所引發的爭議，後來將此法律修訂為『身心障礙學生參加各級中等學校申請入學、甄選入學或登記分發入學者，其國民中學學生基本學力測驗成績以加總分百分之二十五計算』，請舉例說明上述辦法與對身心障礙學生升學優待分數上的差別？並請由教師和家長的學術角度分別討論『身心障礙學生升學優待辦法』可能引發的問題和爭議。

五、解释名詞：
1. 課程實施
2. 美國地方學區的 superintendent
3. 專業發展學校 (professional development schools: PDS)
4. 請闡述 Continum of Placements (or Services) 的意義