※ 注意：請於試卷上「非選擇題作答區」依序作答，並應註明作答之大題及小題題號。

1. 憂鬱症是時下關心台灣精神健康議題者最常提到的問題。試請回答下列諸問題：
   a) 若以 DSM-III 或 DSM-IV 之診斷準則，且以結構性問卷來收集資料，則我國憂鬱症的盛行率大約多高？若以一般自填式之憂鬱評量表來評估，則有多高之憂鬱症盛行率？（5 分）
   b) 以 DSM-III 或 DSM-IV 診斷準則所定義之憂鬱症盛行率，我國之盛行率比美國人口（或白種人人口）資料有什麼差別嗎？（5 分）
   c) 若有差別，請說明可能之原因。（20 分）

2. Attention-deficit/Hyperactivity Disorder (ADHD) is a common disorder in children and adolescents. Please answer the following questions:
   a) It has drawn public attention about the possible over-diagnosis of ADHD worldwide.
      (i) If it is the case, what would be the possible explanation for the over-diagnosis of ADHD? (6%)
      (ii) In contrast, what procedure will you take to object or support this skepticism? (6%)
   b) Longitudinal studies have shown that ADHD predicts substance use disorder at adolescence or adulthood either independently or mediated by its comorbid condition with conduct disorder. However, CNS stimulant is the first-line medication for treating ADHD. Whether treatment with CNS stimulant will increase the risk for substance abuse, particularly amphetamine abuse, becomes one of the parents' main concerns.
      (i) If you were a child psychiatrist or public health professional, what strategies will you take to conduct a systematic review on this topic? (9%)
      (ii) What study will you conduct to answer this question in Taiwan? (9%).

3. Sustained attention deficits measured by the Continuous Performance Test (CPT) have been proposed as a vulnerability indicator of schizophrenia. However, little is known about whether sustained attention deficits in first-degree relatives of schizophrenic patients are associated with familial loading for schizophrenia. A group of researchers examined 107 parents and 84 siblings of simplex schizophrenia families (i.e., only one member was affected with schizophrenia in a family) as well as 72 parents and 56 siblings of multiplex schizophrenia families (i.e., two siblings were affected with schizophrenia in a family), all nonpsychotic, using a semi-structured interview scales and two sessions of the CPT (undegraded and degraded). One signal-detection index of performance on the test, sensitivity (d′), was derived from the hit rate and false-alarm rate as a measure for an individual's ability to discriminate target stimuli from nontarget stimuli. The CPT d′ scores were then standardized with adjustments for sex, age, and education against a community norm. Each subject was categorized on the basis of his or her adjusted z scores of CPT d′ against the cut-off points of -1, -2, and -2.5. Since some parents and siblings were from the same families, researchers adopted statistical models that allow for the adjustment for within-family correlation (e.g., the Generalized Estimating Equations [GEE] method). Part of the results is displayed in the following table.

   On the basis of the preceding background, please answer the following questions (can be in Chinese or English):
   a) Write a paragraph reporting the findings in the table as precisely as the way a research article does. (20%)
   b) Then try to discuss the findings. (20%)

Table. Number and proportion of relatives whose adjusted z score of d′[a] on the Continuous Performance Test (CPT) was below a threshold

	Parents				Siblings			
	Multiplex (n=72[b])	Simplex (n=107[b])	Group comparison[c]		Multiplex (n=56)	Simplex (n=84[b])	Group comparison[c]	
Cut-off in adjusted z score[a]	N (%)	N (%)	χ^2 (df=1)	p	N (%)	N (%)	χ^2 (df=1)	p
Undegraded version								
<-1	28 (38.9)	37 (34.6)	0.23	0.63	24 (42.9)	27 (32.1)	2.33	0.13
<-2	15 (20.8)	21 (19.6)	0.09	0.77	15 (26.8)	22 (26.2)	0.13	0.72
<-2.5	12 (16.7)	16 (15.0)	0.09	0.76	10 (17.9)	15 (17.9)	0.19	0.66
Degraded version								
<-1	28 (41.2)	45 (44.1)	0.15	0.70	34 (60.7)	32 (39.0)	6.76	<0.01
<-2	17 (25.0)	21 (20.6)	0.30	0.58	20 (35.7)	15 (18.3)	5.29	0.02
<-2.5	12 (17.7)	19 (18.6)	0.08	0.78	13 (23.2)	10 (12.2)	3.14	0.08[d]

[a]Adjusted for sex, age, and education level
[b]Four multiplex parents, five simplex parents, and two simplex siblings missing for the degraded test
[c]Score statistics for type 3 GEE analysis, correlation structure: exchangeable
[d]Z=1.95, p=0.05, analysis of GEE parameter estimates, empirical standard error estimates

試題隨卷繳回