

中原大學 102 學年度 碩士班 入學考試

102/3/2 10:00~11:30 心理學系實驗、認知及發展心理學組(甲組) 誠實是我們珍視的美德，
社會、人格、計量及工商心理學組(乙組) 我們喜愛「拒絕作弊，堅守正直」的你！
臨床心理學組(丙組)

科目：心理學方法 (共 3 頁第 1 頁)

■ 可使用計算機，惟僅限不具可程式及多重記憶者 不可使用計算機

Research Methods (33%)

1. Please explain independent variables, dependent variables, extraneous variables, mediating variables, and moderator variables (2points each, for a total of 10 points).
2. A challenge to the repeated measures design is the order effect. Please explain what the order effect is (3 points). In addition, please describe how to control the order effect (10 points).
3. Please discuss the advantages and disadvantages of having a pretest in your research design (10 points).

Statistics (34%)

Note: $\alpha = 0.05$ for all the questions

4. Calculate the correlation between number of the students and their anxiety level. Construct the regression equation based on number of the students as the predictor and anxiety level as the criterion. Calculate 95C.I. of anxiety level if number of the students is 9. (10 points).

number of students	6	8	3	10	8
<u>anxiety level</u>	<u>7</u>	<u>8</u>	<u>1</u>	<u>8</u>	<u>6</u>

5. Six students are randomly selected from a population. They are tested three times in a day. Based on the data below, is there any significant difference found among scores measured in three testing time? (10 points).

<u>student</u>	<u>morning</u>	<u>noon</u>	<u>afternoon</u>
A	1	5	5
B	2	1	5
C	1	3	5
D	0	4	6
E	2	2	3
F	1	2	5

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臨床心理學組(丙組)

科目：心理學方法 (共 3 頁第 2 頁)

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6. Eighteen subjects are randomly assigned to three types of therapy. Construct a ANOVA analysis. (14 points).

	therapy	Method 1	Method 2	Method 3
gender				
male		8	1	6
		4	3	3
		9	4	9
female		3	7	11
		8	3	8
		5	4	10

Psychological Testing (33%)

7. Please discuss the basic procedures in test development. (10 points)
8. Explain the key terms (10 points)
- Distractor analysis
 - Criterion-referenced test
9. The reliability of a 30-item test is .70 and 20 items from the same domain are added to the test. What will the estimated reliability of the 50-item test be? (5 points)
10. A design of three raters rate six applicants as pass versus fail are contained in table below. What is the reliability coefficient? (8 points)

Applicant	Rater		
	A	B	C
1	pass	pass	pass
2	pass	pass	pass
3	fail	fail	fail
4	fail	pass	fail
5	fail	fail	fail
6	fail	pass	pass

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科目：心理學方法 (共 3 頁第 3 頁)

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F table

第 95 百分點

$n_1 \backslash n_2$	1	2	3	4	5	6	7	8	9	10	12	15	20	24	30
1	161.4	199.5	215.7	224.6	230.2	234.0	236.8	238.9	240.5	241.9	243.9	245.9	248.0	249.1	250.1
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38	19.40	19.41	19.43	19.45	19.45	19.46
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81	8.79	8.74	8.70	8.66	8.64	8.62
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00	5.96	5.91	5.86	5.80	5.77	5.75
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77	4.74	4.68	4.62	4.56	4.53	4.50
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06	4.00	3.94	3.87	3.84	3.81
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68	3.64	3.57	3.51	3.44	3.41	3.38
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39	3.35	3.28	3.22	3.15	3.12	3.08
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18	3.14	3.07	3.01	2.94	2.90	2.86
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02	2.98	2.91	2.85	2.77	2.74	2.70
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90	2.85	2.79	2.72	2.65	2.61	2.57
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80	2.75	2.69	2.62	2.54	2.51	2.47
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71	2.67	2.60	2.53	2.46	2.42	2.38
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65	2.60	2.53	2.46	2.39	2.35	2.31
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59	2.54	2.48	2.40	2.33	2.29	2.25
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54	2.49	2.42	2.35	2.28	2.24	2.19
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49	2.45	2.38	2.31	2.23	2.19	2.15
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46	2.41	2.34	2.27	2.19	2.15	2.11
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42	2.38	2.31	2.23	2.16	2.11	2.07
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39	2.35	2.28	2.20	2.12	2.08	2.04
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37	2.32	2.25	2.18	2.10	2.05	2.01
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34	2.30	2.23	2.15	2.07	2.03	1.98
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32	2.27	2.20	2.13	2.05	2.01	1.96
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30	2.25	2.18	2.11	2.03	1.98	1.94
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28	2.24	2.16	2.09	2.01	1.96	1.92
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27	2.22	2.15	2.07	1.99	1.95	1.90
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25	2.20	2.13	2.06	1.97	1.93	1.88
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24	2.19	2.12	2.04	1.96	1.91	1.87
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22	2.18	2.10	2.03	1.94	1.90	1.85
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21	2.16	2.09	2.01	1.93	1.89	1.84
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12	2.08	2.00	1.92	1.84	1.79	1.74
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04	1.99	1.92	1.84	1.75	1.70	1.65
120	3.92	3.07	2.68	2.45	2.29	2.17	2.09	2.02	1.96	1.91	1.83	1.75	1.66	1.61	1.55
∞	3.84	3.00	2.60	2.37	2.21	2.10	2.01	1.94	1.88	1.83	1.75	1.67	1.57	1.52	1.46