

國立高雄大學九十八學年度碩士班招生考試試題

科目：統計學
考試時間：100 分鐘

系所：
經營管理研究所甲組、乙組 是否使用計算機：是
本科原始成績：100 分

I. MULTIPLE CHOICE QUESTIONS

(45%)

所有答案請寫在答案卷，答案請五題寫在一行如下列所示：

All answers must be written on the answer sheet; write answers to five questions in each row, for example:

1. A 2. B 3. C 4. D 5. A
6. B 7. C 8. D 9. A 10. B

1. The time series component which reflects a regular, multi-year pattern of being above and below the trend line is
 - a. a trend
 - b. seasonal
 - c. cyclical
 - d. irregular

2. To compute an interval estimate for the difference between the means of two populations when samples are small, the t distribution can be used if it can be assumed that
 - a. the populations are normally distributed and the variances are equal
 - b. the variances are not equal
 - c. the population proportions are equal
 - d. the population means are equal

3. A nonparametric version of the parametric analysis of variance test is the
 - a. Kruskal-Wallis Test
 - b. Mann-Whitney-Wilcoxon Test
 - c. sign test
 - d. Wilcoxon Signed-rank test

4. If a hypothesis test leads to the rejection of the null hypothesis
 - a. a Type II error must have been committed
 - b. a Type II error may have been committed
 - c. a Type I error must have been committed
 - d. a Type I error may have been committed

國立高雄大學九十八學年度碩士班招生考試試題

科目：統計學
考試時間：100 分鐘

系所：
經營管理研究所甲組、乙組 是否使用計算機：是
本科原始成績：100 分

5. In acceptance sampling, the risk of rejecting a good quality lot is known as
 - a. Consumer's risk
 - b. Producer's risk
 - c. a Type II error
 - d. None of these alternatives is correct.

6. A method of selecting a sample by randomly selecting the first element and then selecting every K^{th} element thereafter is
 - a. area sampling
 - b. stratified sampling
 - c. systematic sampling
 - d. stratified simple random sampling

7. If we consider the simple random sampling process as an experiment, the sample mean is
 - a. always zero
 - b. always smaller than the population mean
 - c. a random variable
 - d. exactly equal to the population mean

8. In regression analysis, an outlier is an observation whose
 - a. mean is larger than the standard deviation
 - b. residual is zero
 - c. mean is zero
 - d. residual is much larger than the rest of the residual values

9. Random samples of size 81 are taken from an infinite population whose mean and standard deviation are 200 and 18, respectively. The distribution of the population is unknown. The mean and the standard error of the mean are
 - a. 200 and 18
 - b. 81 and 18
 - c. 9 and 2
 - d. 200 and 2

國立高雄大學九十八學年度碩士班招生考試試題

科目：統計學
考試時間：100 分鐘

系所：
經營管理研究所甲組、乙組 是否使用計算機：是
本科原始成績：100 分

10. To avoid the problem of not having access to Tables of F distribution with values given for the lower tail, the numerator of the test statistic should be the one with
 - a. the larger sample size
 - b. the smaller sample size
 - c. the larger sample variance
 - d. the smaller sample variance

11. The sampling distribution for a goodness of fit test is
 - a. the Poisson distribution
 - b. the t distribution
 - c. the normal distribution
 - d. the chi-square distribution

12. A property of a point estimator that occurs whenever larger sample sizes tend to provide point estimates closer to the population parameter is known as
 - a. efficiency
 - b. unbiased sampling
 - c. consistency
 - d. relative estimation

13. The random variable for a chi-square distribution may assume
 - a. any value between -1 to 1
 - b. any value between $-\infty$ to $+\infty$
 - c. any negative value
 - d. any value greater than zero

14. The required condition for using an ANOVA procedure on data from several populations is that the
 - a. the selected samples are dependent on each other
 - b. sampled populations are all uniform
 - c. sampled populations have equal variances
 - d. sampled populations have equal means

國立高雄大學九十八學年度碩士班招生考試試題

科目：統計學
 考試時間：100 分鐘

系所：
 經營管理研究所甲組、乙組 是否使用計算機：是
 本科原始成績：100 分

15. To construct an interval estimate for the difference between the means of two populations which are normally distributed and have equal variances, we must use a t distribution with (let n_1 be the size of sample 1 and n_2 the size of sample 2)
- $(n_1 + n_2)$ degrees of freedom
 - $(n_1 + n_2 - 1)$ degrees of freedom
 - $(n_1 + n_2 - 2)$ degrees of freedom
 - $(n_1 - n_2 + 2)$ degrees of freedom

II. Define the following key terms ***by words only***: (20%)

- | | |
|------------------------|---------------------|
| (a) Significance level | (b) Random variable |
| (c) Power of the test | (d) p -value |

III. Let X_1, X_2, \dots, X_n be independent, uniformly distributed random variables on the interval $[\theta, 10]$. (20%)

- Find the maximum likelihood estimator $\hat{\theta}$ of θ .
- Find an estimator $\tilde{\theta}$ for θ by the method of moment.
- Find the sufficient statistic of θ .

IV. Use the following joint probability distribution to compute $\Pr(Y < 1, X > 0)$, $\Pr(Y < 2)$, $\text{Cov}[Y, X^2]$, $E[Y | X = 0]$, and $\text{Var}[Y | X = 0]$. (15%)

		X		
		0	1	2
Y	0	0.05	0.1	0.03
	1	0.21	0.11	0.19
	2	0.08	0.15	0.08

國立高雄大學九十八學年度碩士班招生考試試題

科目：經濟學
考試時間：100 分鐘

系所：
經營管理研究所甲組
本科原始成績：100 分

是否使用計算機：否

I. MULTIPLE CHOICE QUESTIONS

(60%)

所有答案請寫在答案卷，答案請五題寫在一行如下列所示：

All answers must be written on the answer sheet; write answers to five questions in each row, for example:

1. A 2. B 3. C 4. D 5. A
6. B 7. C 8. D 9. A 10. B

1. Larry has a comparative advantage in writing a term paper if he
 - A) can write a paper faster than the other students in class.
 - B) has an absolute advantage in writing a term paper.
 - C) always earns an A on his papers.
 - D) has a low opportunity cost for writing a term paper.
 - E) All of the above must be true for Larry to have a comparative advantage.

2. Which of following is **not** true of an equilibrium price?
 - A) Consumers who are willing to pay the equilibrium price can acquire the good.
 - B) It measures the value of the last unit sold to consumers.
 - C) It is always a fair and just price.
 - D) Firms who are willing to accept the equilibrium price can sell what they produce.
 - E) It measures the cost of resources required to produce the last unit.

3. Demand tends to be _____ in the short run than in the long run.
 - A) more elastic
 - B) more inelastic
 - C) more volatile
 - D) less important
 - E) None of the above

4. The slope of any production possibilities curve is _____ because _____.
 - A) negative; production of one of the two goods is always insufficient
 - B) negative; to produce more of one good means less production of the other
 - C) constant; the tradeoff in production never changes
 - D) positive; to produce more of one good means more production of the other
 - E) positive; to produce more of one good means less production of the other

國立高雄大學九十八學年度碩士班招生考試試題

科目：經濟學
考試時間：100 分鐘

系所：
經營管理研究所甲組
本科原始成績：100 分

是否使用計算機：否

5. Ted can wax 4 cars per day or wash 12 cars. A combination of 1 wax and 6 washes per day is probably a(n):
 - A) efficient and attainable point.
 - B) efficient but not attainable point.
 - C) attainable and inefficient point.
 - D) unattainable point.
 - E) unattainable and inefficient point.
6. Congestion of the work space and fixed factors of production at the firm
 - A) explain high employee turnover.
 - B) cause increased workspace violence.
 - C) demonstrate the law of diminishing marginal returns.
 - D) explain decreased employee morale.
 - E) result in increased self-employment.
7. The shutdown condition applies
 - A) only in the long run.
 - B) in the long run and in the short run.
 - C) only in the short run.
 - D) only to firms that are just breaking even.
 - E) to all firms, all the time.
8. If the opportunity cost of producing a good domestically exceeds the opportunity cost of purchasing it on the world market, a country can gain by
 - A) increasing production and decreasing imports.
 - B) increasing production and decreasing exports.
 - C) decreasing production and increasing exports.
 - D) decreasing production and increasing imports.
 - E) maintaining a closed economy.
9. Products have network economies if they
 - A) can be used by more than one person at a time.
 - B) are cheaper to produce as more people buy them.
 - C) are more valuable to own as more people own them.
 - D) make your other possessions more valuable.
 - E) have many complements.

國立高雄大學九十八學年度碩士班招生考試試題

科目：經濟學
考試時間：100 分鐘

系所：
經營管理研究所甲組
本科原始成績：100 分

是否使用計算機：否

10. The prisoner's dilemma refers to games where
- A) neither player has a dominant strategy.
 - B) one player has a dominant strategy and the other does not.
 - C) both players have a dominant strategy.
 - D) both players have a dominant strategy which results in the largest possible payoff.
 - E) both players have a dominant strategy which results in a lower payoff than their dominated strategies.
11. Private incentives in markets with external benefits lead to _____; private incentives in markets with external costs lead to _____.
- A) maximum total economic surplus; deadweight loss
 - B) deadweight loss; deadweight loss
 - C) excess total economic surplus; efficiency
 - D) excess total economic surplus; deadweight loss
 - E) efficiency; efficiency
12. When auctions, such as those used on eBay, are used to sell a product
- A) information about consumers' true reservation prices is minimized.
 - B) information about consumers' true reservation prices is revealed.
 - C) consumers have an incentive to bid higher than their true reservation prices.
 - D) the consumer with the highest reservation price rarely has the winning bid.
 - E) consumers do not have an incentive to bid their true reservation prices.
13. If it is impossible or highly costly to prevent consumers from consuming a good when they have not paid for it, the good is a(n) _____ good.
- A) nonexcludable
 - B) pure public
 - C) private
 - D) nonrival
 - E) common

國立高雄大學九十八學年度碩士班招生考試試題

科目：經濟學
考試時間：100 分鐘

系所：
經營管理研究所甲組
本科原始成績：100 分

是否使用計算機：否

14. Deflation is a situation in which the:
- A) quantity of goods and services produced is increasing over time.
 - B) quantity of goods and services produced is decreasing over time.
 - C) prices of most goods and services are falling over time.
 - D) prices of most goods and services are rising over time.
 - E) prices of most goods and services are not changing over time.
15. If the Fed wishes to reduce nominal interest rates, it must engage in an open market ____ of bonds that ____ the money supply.
- A) sale; increases
 - B) sale; decreases
 - C) sale; does not change
 - D) purchase; increases
 - E) purchase; decreases
16. Taiwan exports tools to the United States. Consumers in Taiwan will probably pay a(n) _____ price for tools with free trade than they would with a closed economy.
- A) lower
 - B) somewhat lower
 - C) higher
 - D) equal
 - E) more fair
17. The gold standard is an example of a(n) _____ exchange rate system.
- A) fixed
 - B) flexible
 - C) floating
 - D) dollarized
 - E) speculative

國立高雄大學九十八學年度碩士班招生考試試題

科目：經濟學
考試時間：100 分鐘

系所：
經營管理研究所甲組
本科原始成績：100 分

是否使用計算機：否

18. Holding all else constant, a decrease in the real interest rate on U.S. assets will ____ the demand for dollars in the foreign exchange market and ____ the equilibrium Mexican peso/U.S. dollar exchange rate.
- A) increase; increase
 - B) increase; decrease
 - C) not change; not change
 - D) decrease; increase
 - E) decrease; decrease
19. Holding constant risk and the real returns available abroad, higher domestic real interest rates ____ capital inflows, ____ capital outflows, and ____ net capital inflows.
- A) increase; increase; increase
 - B) increase; increase; decrease
 - C) increase; decrease; increase
 - D) decrease; decrease; decrease
 - E) decrease; increase; decrease
20. If new production technology is put into practice that allows workers to process more chickens per hour, then the real wage of unskilled workers in poultry processing plants is predicted to ____ and the employment of unskilled workers in poultry processing plants is predicted to ____.
- A) increase; increase
 - B) increase; decrease
 - C) increase; not change
 - D) decrease; decrease
 - E) decrease; not change

國立高雄大學九十八學年度碩士班招生考試試題

科目：經濟學
考試時間：100 分鐘

系所：
經營管理研究所甲組
本科原始成績：100 分

是否使用計算機：否

- II. Under the shopping voucher (消費卷) program, all Taiwanese citizens and their foreign spouses will be eligible to each receive NT\$3,600 in vouchers. The primary objective of this program is to stimulate consumption and give a lift to the slumping business activities in Taiwan. Describe the effectiveness of this program by both the classical model and the Keynesian model graphically. Which model is more appropriate under the current circumstance? Why? (20%)
- III. Consider a product for which demand is $P = 950 - Q_T$, where Q_T is the total amount produced by all of homogenous suppliers in the market. Assume that both marginal cost (MC) and average cost (AC) are equal to 50 for all firms. (20%)
- In a perfectly competitive market, determine the equilibrium price and quantity.
 - Find the market price and output when there exists only a single firm.
 - Assume that there are two firms, firm 1 and firm 2, in the market.
 - Find the Cournot equilibrium.
 - Find the Stackelberg equilibrium when the firm 2 acts as a leader.

國立高雄大學九十八學年度碩士班招生考試試題

科目：管理學
考試時間：100 分鐘

系所：
經營管理研究所乙組
本科原始成績：100 分

是否使用計算機：否

I. Multiple Choice Questions (30%)

Please select ONE most appropriate answer in the following questions.

- () 1. Which of the following statements is **TRUE**?
- A) Outsourcing reduces the flexibility of managers.
 - B) Managers frequently have access to complete information.
 - C) The process by which division of labor occurs is known as job specialization.
 - D) Groups that buy goods that another organization produces are known as suppliers.
 - E) Ethics and “the law” are the same thing.
- () 2. Which of the following statements is **FALSE**?
- A) Most customers prefer high-quality products to low-quality products.
 - B) Most day-to-day decisions in business are programmed decisions.
 - C) Unfair treatment in the work place on the basis of gender is a thing of the past.
 - D) Unsatisfied managers are more likely to quit an organization.
 - E) Typically, the matrix structure within organizations is very flexible.
- () 3. Dan strongly believes that it is important that he spends time with his children on the weekends. Which of the following situations would most likely result in a very strong desire to reduce cognitive dissonance?
- A) Being made by his boss to work weekends or lose his job.
 - B) Working over the weekend in order to cover for a sick friend.
 - C) Working over the weekend in order to secure a large cash bonus.
 - D) Working over the weekend in order to free up time for a golf game later in the week.
 - E) Working over the weekend in order to complete a project for a client vital to the company.
- () 4. When individuals observe another person’s behavior, they attempt to determine whether it is internally or externally caused. This phenomenon is most directly relevant to which of the following?
- A) the Pygmalion effect
 - B) projection theory
 - C) attribution theory
 - D) selective perception theory
 - E) expectancy theory

國立高雄大學九十八學年度碩士班招生考試試題

科目：管理學
考試時間：100 分鐘

系所：
經營管理研究所乙組
本科原始成績：100 分

是否使用計算機：否

- () 5. Essential Job Functions are:
- A) Part of a job description
 - B) The reason the position exists
 - C) The job duties that employees must be able to perform, with or without reasonable accommodation
 - D) All of the above
 - E) None of the above
- () 6. Cultures differ in terms of how influence is distributed and how people react to others who have more or less influence. This aspect of culture is called _____.
- A) power distance
 - B) uncertainty avoidance
 - C) masculinity/femininity
 - D) individualism
 - E) none of the above
- () 7. A customer can either afford to buy a new mp3 device or a new Xbox 360 game station, but not both. After purchase, regardless of the choice, the customer will probably find reasons to feel good about the selection. Why?
- A) Because of cognitive dissonance the customer will be motivated to resolve the conflict by creating or emphasizing positive aspects of the purchase and the negative aspects of the product not chosen.
 - B) Because of a need for achievement, the customer will be motivated to want the product that is the most expressive of power and status.
 - C) People always feel good about buying a product after they begin using it.
 - D) The typical reaction to an approach-avoidance conflict is to be motivated to approach only the positive aspect of the conflict, thus ensuring a satisfactory resolution of the conflict.
 - E) None of the above
- () 8. The type of interview where the interviewer tries to deduce what the applicant's on the job performance will be based on his answers to questions about past experiences is called a:
- A) Situational Interview
 - B) Behavioral Interview
 - C) Stress Interview
 - D) Job-related Interview
 - E) None of the above

國立高雄大學九十八學年度碩士班招生考試試題

科目：管理學
考試時間：100 分鐘

系所：
經營管理研究所乙組
本科原始成績：100 分

是否使用計算機：否

- () 9. Which of the following is **NOT** true of charismatic leaders?
- A) They have a vision and the ability to articulate the vision.
 - B) They have behavior that is unconventional.
 - C) They are willing to take high personal risk.
 - D) They exhibit behaviors that are consistent with their followers' behaviors.
 - E) They typically communicate high performance expectations of their followers.
- () 10. Groups of employees who meet regularly to discuss ways to increase quality are called:
- A) Peer groups
 - B) Quality circles
 - C) Strategy groups
 - D) Self-managed teams
 - E) A flexible workforce
- () 11. A subordinate changes his behavior from a dysfunctional to a functional behavior, and his manager then removes an undesired outcome. This is known as:
- A) Positive reinforcement.
 - B) Extinction.
 - C) Negative reinforcement.
 - D) Inequity.
 - E) Instrumentality.
- () 12. An organization creates a list of possible future forecasts of business situations and creates a plan to respond to each of these forecasts. This is known as:
- A) synergy planning.
 - B) ad hoc planning.
 - C) divisional-level planning.
 - D) scenario planning.
 - E) functional planning.
- () 13. A white, female manager assumes a number of things about a subordinate that are inaccurate just because that subordinate is a black male and "all black males are like that." This manager is exhibiting:
- A) The similar-to-me effect.
 - B) Quid pro quo harassment.
 - C) The glass ceiling.
 - D) Stereotyping.
 - E) A hostile work environment.

國立高雄大學九十八學年度碩士班招生考試試題

科目：管理學
考試時間：100 分鐘

系所：
經營管理研究所乙組
本科原始成績：100 分

是否使用計算機：否

- () 14. If behavioral leadership theories are correct, then _____.
A) leadership behaviors are consistent
B) leaders are born with leadership behaviors
C) leaders' behavior should be altered
D) leadership skills can be trained
E) women generally make better leaders than men
- () 15. The component of an HRM system that focuses on attempting to attract and to hire employees who have the abilities and experiences to help the organization to achieve its goals is known as:
A) Training.
B) Development.
C) Recruitment and selection.
D) Performance appraisal.
E) Feedback.

II. Essay Questions

1. (20%) Assume you are a consultant who has been asked by the XYZ Corporation to advise them on how to deal with the following problem:

The basic organization structure of XYZ is still the same as it was when the company was founded in 1956. It is a very traditional bureaucracy with functional departmentalization. The company has about 1000 employees in three geographic locations. Industry changes in the last decade are causing many competitive problems for XYZ. The new CEO, John Johns, is the grandson of the founder. He thinks that XYZ's organization structure hinders them from responding effectively to the new challenges. John is very concerned with the long-term future of the company, and has asked you to help him understand what steps ought to be taken.

Articulate the assumptions you are making about this case, and develop a suggested organizational strategy for John Johns.

Note: In developing your answer be sure to give a rationale as to why the concepts and theories are the most relevant and appropriate for the situation described.

國立高雄大學九十八學年度碩士班招生考試試題

科目：管理學
考試時間：100 分鐘

系所：
經營管理研究所乙組
本科原始成績：100 分

是否使用計算機：否

2. (15%) "**Globalization**" is a significant force changing the nature of business and competition in the world today. Describe and discuss the effects of "globalization" on managers and management practices.

3. (20%) Consider the following situation:

You are the founder of a newly start-up bakery shop. For financing your own company you not only had burn up all your savings but also float a loan from a commercial bank. A couple days ago you happened to discover a copy of unpublished information that almost all the products your company produced were contaminated by fatal amount of Melamine. According to your understanding this prohibited chemical ingredient comes from a dairy product imported from Mainland China. Melamine is described as being "Harmful if swallowed, inhaled or absorbed through the skin. Chronic exposure may cause cancer or urinary system damage." What will you do?

Please prepare **TWO** possible scenarios **AT LEAST** to extricate yourself from the above difficult position and describe its gains and losses in more detail for each scenario.

4. (15%) Explain the phrase "**Pay as a Motivator**" from the perspective of Need Theory, Equity Theory, Goal Setting Theory, and Learning Theory respectively.