I. Questions 1 to 4. Read the stories of identical twins and match names with pictures (there are two pictures/answers for each pair of twins).

1. Tony and Roger (   )
2. Jerry and Mark (   )
3. Paula and Kitty (   )
4. Oscar and Jack (   )

Do you know any identical twins? Identical twins look the same, and they often do the same things - wear the same clothes, listen to the same music, eat the same food, and even do the same jobs.

But why? Because they're twins? Or because they grew up together in the same family?

Well, here are some twins who didn't grow up together. They went to live in different families when they were babies, and they met for the first time when they were adults.

- Tony and Roger met when they were 24. They both use the same after-shave, smoke the same cigarettes and use the same kind of toothpaste. And they both hold a pen in the same, unusual way.
- Tina and Jane were 36 when they first met. They wear seven rings on their fingers. One has a son called Andrew Richard, and the other has a son called Richard Andrew.
- Jerry and Mark are 40. They both have big moustaches, and wear the same kind of glasses. They're both electricians, and in their free time they work as firefighters.
- Paula is 26. After she met her twin Kitty for the first time, she sent her a birthday present. When she opened her own birthday present from Kitty, it was exactly the same thing.
- Oscar and Jack met when they were 65. They both read magazines from the back to the front, and when they're in a lift, they like to frighten the other people by sneezing loudly.
II. Questions 5 to 10. Look at the list of TV programmes and choose the correct channel for each question.

5. Is there any quiz show about music tonight? Channel (   )
6. Which Channel is the best for news? Channel (   )
7. Is there any football on this evening? Channel (   )
8. I’d like to watch cartoon. Channel (   )
9. I want to watch a good documentary about the internet. Channel (   )
10. I like romance tonight, but not the soaps, they are too short. Channel (   )

A. 6.00 News, weather
B. 6.00 Sports news
C. 6.45 Today. The main stories behind the news.
D. 7.30 Focus: The World Wide Web. How is the internet changing our lives?
E. 8.30 Wildlife on One. The lions of the Sahara.

6.00 Dancing shoes (1942). Fred Astaire and Ginger Rogers star in this romantic musical.
6.00 The boys next door. Comedy series.
7.30 That’s the question. Quiz show with Matt Murphey.
8.00 News
8.15 My first billion. Interviews with very rich people. This week: Bill Gates.
9.00 Downtown. Jill falls in love – and Rod has a problem.
9.30 Streetlife: More soap from the City. Will Sue and Trev get back together?
6.00 Football, live from Milan.
8.00 Formula 1 motor-racing. All the latest news from Tokyo.
8.30 X-treme sports: Skateboarding and snowboarding.
6.00 Cartoon time. American cartoons.
7.00 Top of the Charts. This week’s top 40.
7.30 Band of the week: The Morgs in Concert.
9.00 News
9.05 Play it again, Sam! Music quiz. This week’s guest is Susan Shields.
9.00 Sports news
III. Questions 11 to 20. Choose the answer that best completes the sentence:

11. Not only ________ places of beauty, they serve scientific and educational purposes as well.
   A) botanical gardens to be  B) are botanical gardens  C) botanical gardens  D) to be botanical gardens.

12. In 1791 Quebec was divided into two sections, Upper Canada and Lower Canada, ________ were ruled by elected assemblies.
   A) in which both  B) both of them  C) they both  D) both of which

13. In Michigan, ________ over six hundred feet deep
   A) salt deposits  B) where salt deposits are  C) having salt deposits  D) there are salt deposits

14. The melting point is the temperature ________ a solid changes to a liquid.
   A) which  B) on which  C) at which  D) to which

15. ________ rises to the surface of the Earth, a volcano is formed.
   A) Liquid magma  B) whenever liquid magma  C) liquid magma, which  D) That liquid magma

16. ________ by the ________ graduation requirements, the student diligently prepared
   for the upcoming examination.
   A) Dissuaded . . . negligible  B) Persuaded . . . acrimonious  C) Undaunted . . . stringent
   D) Aghast . . . bizarre

17. Because of his ________ record of lying to police, the suspect was regarded as a(n) ________ criminal.
   A) irascible . . . disputatious  B) straight . . . incorrigible  C) circuitous . . . insipid
   D) inveterate . . . habitual

18. Philosophers tell us that one’s lifetime is ________ when considered from the viewpoint of ________ making humans appear much less important than they think in the grand scheme of things.
   A) laudatory . . . prestidigitation  B) jaded . . . youth  C) ephemeral . . . eternity
   D) gauche . . . theology

19. Some experts think that the origin of schizophrenia is ________; others believe it is ________.
   A) contiguous . . . environmental  B) congenital . . . environmental
   C) contagious . . . pathological  D) exogenous . . . celestial

20. Can you believe that I won the photo contest with the ________ of the two pictures that was most ________ even though I only tried to hang them where there were nails.
   A) sophistry . . . hallow  B) juxtaposition . . . aesthetic
   C) trappings . . . romantic  D) corollary . . . extraneous
IV. Questions 21 to 30. Read the following passages and choose the best answer for each question

For most modern airport, the major design problem is scale—how to allow adequate space on the ground for maneuvering wide-body jets while permitting convenient and rapid movement of passengers departing, arriving, or transferring from one flight to another.

Most designs for airport terminals take one of four approaches. In the linear plan, the building may be straight or curved. The passengers board aircraft parked next to the terminal. This plan works well for small airports that need to provide boarding areas for only a few aircraft at a time.

In the pier plan, narrow corridors or piers extend from a central building. This plan allows many aircraft to park next to the building. However, it creates long walking distances for passengers.

In the satellite plan, passengers board aircraft from small terminals that are separated from the main terminals. Passengers reach the satellites by way of shuttle trains or underground passageways that have shuttle trains or moving sidewalks.

The transporter plan employs some system of transport to move passengers from the terminal building to the aircraft. If buses are used, the passengers must climb a flight of stairs to board the aircraft. If mobile lounges are used, they can link up directly with the aircraft and protect passengers from the weather.

21. It can be inferred that scale would not pose a major design problem at airports if
A) aircraft did not need so much space to maneuver on the ground
B) airports are larger
C) airplanes could fly faster
D) other forms of transportation were more efficient

22. The passage implies that the term “satellite plan” is used because
A) satellites are launched and tracked from the airport
B) the airport makes use of the most modern, high-technology equipment
C) small terminals encircle the main terminal
D) airports that make use of this plan utilized data from weather satellites

23. It can be inferred that mobile lounges would be more desirable than buses when
A) passengers are in a hurry
B) passengers need to save money
C) passengers need protection from the elements
D) passengers need to travel for a long distance from the terminal to the aircraft

24. The linear plan would probably be best at
A) a busy airport
B) an airport used by many small aircraft
C) an airport that serves a large city
D) an airport with only a few arrivals or departures

Another critical factor that plays a part in susceptibility to colds is age. A study done by the University of Michigan School of Public Health revealed particulars that seem to hold true for the general population. Infants are the most cold-ridden group, averaging more than six colds in their first year. Boys have more colds than girls up to age three. After the age of three, girls are more susceptible than boys, and teenage girls average three colds a year to boy’s two.
The general incidence of colds continues to decline into maturity. Elderly people who are in good health have as few as one or two colds annually. One exception is found among people in their twenties, especially women, who show a rise in cold infections, because people in this age group are most likely to have young children. Adults who delay having children until their thirties and forties experience the same sudden increase in cold infections.

The study also found that economics plays an important role. As income increases, the frequency at which colds are reported in the family decreases. Families with the lowest income suffer about a third more colds than families at the highest end. Lower income generally forces people to live in more cramped quarters than those typically occupied by wealthier people, and crowding increases the opportunities for the cold virus to travel from person to person. Low income may also, adversely influence diet. The degree to which poor nutrition affects susceptibility to colds is not yet clearly established, but an inadequate diet is suspected of lowering resistance generally.

25. The paragraph that precedes this passage most probably deals with
A) minor diseases other than cold.
B) the recommended treatment of colds.
C) a factor that affects susceptibility to colds.
D) methods of preventing colds

26. Which of the following is closest in meaning to the word ‘particulars’ in the first paragraph?
A) minor errors
B) small distinctions
C) individual people
D) specific facts

27. What does the author claim about the study discussed in the passage?
A) It contains many inconsistencies.
B) It is most relevant to children.
C) It contradicts the results of earlier studies in the field.
D) Its results apparently are relevant for the population as a whole.

28. There is information in the second paragraph of the passage to support which of the following conclusions?
A) Men are more susceptible to colds than women.
B) Children infect their parents with cold.
C) Infant boys is the most likely group to catch colds.
D) People who don’t have children are more susceptible to colds than those do.

29. Find a best place to insert the following sentence into paragraph three: “Low income may also have an adverse effect on diet.”

The study also found that economics plays an important role. A) As income increases, the frequency at which colds are reported in the family decreases. B) Families with the lowest income suffer about a third more colds than families at the highest end. C) Lower income generally forces people to live in more cramped quarters than those typically occupied by wealthier people, and crowding increases the opportunities for the cold virus to travel from person to person. Low income may also, adversely influence diet. D) The degree to which poor nutrition affects susceptibility to colds is not yet clearly established, but an inadequate diet is suspected of lowering resistance generally.

30. The author’s tone in this passage could best be described as
A) neutral and objective
B) tentative but interested
C) humorous
D) highly scientific and critical
1. Suppose that $X$ and $Y$ are independent random variables, each having a normal distribution with mean 0 and variance 1. 
   (a) Find the moment-generating function of $U = XY$. 
   (b) Evaluate $E(U)$ and $\text{Var}(U)$. 

2. Let $X_1, X_2, \ldots, X_n$ be independent, uniformly distributed random variables on the interval $[0, \theta]$. 
   (a) Find the maximum likelihood estimator $\hat{\theta}$ of $\theta$. 
   (b) Find $E(\hat{\theta})$ 
   (c) Find a sufficient statistic of $\theta$. 

3. Suppose you have cross-section data on income $x$ and electricity consumption $y$ for three regions and you have regressed $lny$ on $lnx$ for each region and for the full sample, obtaining (standard errors in parentheses): 

<table>
<thead>
<tr>
<th>Region</th>
<th>$\hat{\beta}$</th>
<th>SSE</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1.10 (0.05)</td>
<td>45</td>
<td>92</td>
</tr>
<tr>
<td>B</td>
<td>0.90 (0.1)</td>
<td>32</td>
<td>82</td>
</tr>
<tr>
<td>C</td>
<td>0.85 (0.08)</td>
<td>11</td>
<td>32</td>
</tr>
<tr>
<td>All</td>
<td>0.88 (0.05)</td>
<td>100</td>
<td>206</td>
</tr>
</tbody>
</table>

   where $\hat{\beta}$ is the slope coefficient estimate (You do not need to actually conduct the test but have to state the decision rule as clear as possible). 
   (a) Test that this equation is the same for all regions. 
   (b) Assuming that these equations are the same, test that the common elasticity is unity. 

4. Compaq Computers holds a 16% share of personal computer market in the U.S and a 12.7% share of the worldwide market. Suppose a market researcher believes that Compaq holds a higher share of the market in the southwestern region of the U.S. He randomly selects 428 people who purchased a personal computer in the last month in the southwestern region of the U.S. Eighty-four of these purchases were Compaq computers. 
   (a) Verify his claim using a 95% level of confidence. 
   (b) What is the probability of making a type II error if the market share is really 0.21 in the southwestern region of the U.S.? (You do not need to actually calculate the probability but have to lay out the procedure as clear as possible) 

5. Interpret the following key terms by words only: 
   (a) $P$ value 
   (b) 95% confidence interval
1. Al has an income $M$ and he only consumes bread and ham. Currently, the price for bread is $2/loaf and the price for ham is $4/lb.
   
   a) (5 points) Please write down the budget constraint and draw the budget line Al would face and shade in his budget set. Please label axis, intercepts, slope, and budget set. You will not obtain full mark if you don’t label budget set well but only indicate budget line.
   
   b) (5 points) If Al’s preferences for bread and ham are represented by the utility function $u(B,H)=5B^{1/2}H^{1/2}$, where $B$ is bread and $H$ is ham. Derive the demand functions for bread and ham as a function of prices and income.
   
   c) (5 points) Find the consumption bundle Al will choose if his income $M = $100.
   
   d) (5 points) Calculate the price elasticity of Al’s consumption for bread using the information you obtain from b) and c).
   
   e) (5 points) Calculate the (Slutsky) substitution effect, income effect, and total effect on Al’s bread consumption if the price of bread changes from $2/loaf to $4/loaf.

2. Bill produces watermelon on a plot of land, using the technology $Y = L^{1/2}W^{1/2} + 10$, where L is Bill’s labor, and W the amount of water sprayed on the land.
   
   a) (5 points) On a completely labeled diagram, draw isoquants for Bill’s technology for output levels $Y = 10$, $Y = 50$, and $Y = 100$.
   
   b) (5 points) If the water input is held constant at 16 gallons, write down the relationship between Bill’s labor and the number of watermelons he grows. Graph this relationship on a separate diagram. What is the interpretation of the slope changes on this curve?
   
   c) (5 points) What happens to Bill’s watermelon production if he doubles both his labor and his use of water? What sort of returns to scale properties does his technology exhibit?

3. Suppose that Peter has an initial wealth $10,000 and faces a loss of $6,400 with probability 0.25. If Peter’s utility function is $u(x)=x^{1/2}$.
   
   a) (5 points) What will be Peter’s expected utility in this case?
   
   b) (5 points) A risk premium is defined as the highest amount an individual is willing to pay for full insurance. Please find Peter’s risk premium for full insurance.
4. Consider a pure exchange economy inhabited by Jane and Ramon for whom the only question is how to allocate the endowment of 10 apples and 20 yards of cloth.
   a) (3 points) Describe concisely the idea of consumption efficiency (or equivalently the Pareto efficiency) in this economy.
   b) (5 points) Subscript variables associated with Jane by J and those with Ramon by R, explain the intuition, with a numerical example, behind an important result that any Pareto efficient allocation of apples and cloth implies equal marginal rates of substitution between Jane and Ramon, or, in notations, \( MRS_J = MRS_R \), for any regular utility form.
   c) (7 points) One can find the ‘contract curve’ corresponding to all the consumption efficiency allocations in an Edgeworth box analysis. Derive this curve, in terms of \( A_J, C_J \), given the utility of Jane as: \( U_J = A_{J}^{1/3} C_{J}^{1/3} \) and that of Ramon as: \( U_R = A_{R}^{1/3} C_{R}^{1/3} \), where \( A_J(A_R) \) denotes the quantity of apples allocated to Jane (Ramon) and \( C_J(C_R) \) that of cloth allocated to Jane (Ramon).

5. In an market of duopoly provided by firm 1 and 2 between which a Cournot type of competition is present, simultaneous decisions on quantity are made by both firms in order to maximize their profits. Subscript variables associated with firm 1 by 1 and those with firm 2 by 2, the total cost of firm i, where i = 1 or 2, is \( c_i(q_i) = c_i q_i \), and the market price is determined by \( P(q) = a - b q \), where \( q_i \) is the quantity provided by firm i, \( q \) is the total quantity, \( a, b, \text{and} c \) are positive constants.
   a) (6 points) Derive the best response functions of both firms.
   b) (5 points) Find the Nash equilibrium quantities.
   c) (9 points) Instead of only two firm, suppose there are n firms with identical total cost functions \( c_i(q_i) = c q_i \), where i = 1, 2, ..., n, and \( q = \sum_{i=1}^{n} q_i \), compute the limit of Nash equilibrium as \( n \rightarrow \infty \).

6. Imagine a university generating positive externalities to its surrounding communities. Denoting the number of students—its output—by \( Q \), suppose the university’s objective is to maximize its net ‘benefit’ measured in dollars and its marginal cost and marginal (private) benefit are given by \( MC=30+2Q \) and \( MPB=120-Q \). Also suppose that the marginal ‘external’ benefit, actually the positive externalities, is \( MEB=0.5Q \).
   a) (7 points) Calculate the socially efficient quantity of students and the quantity produced by the university.
   b) (8 points) Design a Pigouvian subsidy to correct the inefficiency caused by the externality. Your answer should include the size of the subsidy and the explanation as to why this works.
1. (25%)  

(a) If the inflation rate is slow to adjust and is initially above a level at which aggregate expenditures equal long-run aggregate supply, what will be the level of output? What will happen if the aggregate demand-inflation (ADI) curve shifts to the left? To the right? If the long-run aggregate supply (LRAS) curve shifts to the left? To the right? (9%)  

![Figure 1](image1)  

(b) What role do changes in expectations play in shifting the SRIA (short-run inflation adjustment) curve? What difference does it make whether expectations are adaptive or rational? (8%)  

![Figure 2](image2)  

(c) What are the difference between a policy of inflation targeting and a policy of price level targeting? (8%)
2. (25%)
   (a) What are the key assumptions of neoclassical growth theory? (7%)
   (b) What are the key assumptions of new (endogenous) growth theory? (7%)
   (c) Contrast neoclassical growth theory and new growth theory, and try to provide graphical analysis. (11%)

3. Analyze the following questions about Taiwan by using the Mundell-Fleming framework. (26%)
   (a) If Taiwan suffers from a recession, should our government use monetary or fiscal policy to stimulate the economy? (10%)
   (b) If Taiwan tightened the import policy, what would happen to the domestic output, trade balance, and the exchange rate? Consider both the short-run and the long-run impacts. (16%)

4. Please state the following key terms briefly: (24%, each of 4%)
   (a) Lucas critique
   (b) Sacrifice ratio
   (c) Time inconsistency
   (d) Debt-deflation theory
   (e) Quantity equation
   (f) Hysteresis
1. Define the following key terms **by words only**: (20%)
   (a) Type I and Type II error
   (b) The level of significance
   (c) Unbiasedness
   (d) Relative efficiency

2. Consider a random sample of size \( n \) from a Poisson distribution, \( X_i \sim \text{Poisson} (\theta) \). (30%)
   (a) Find the maximum likelihood estimator of \( \theta \).
   (b) Find a sufficient statistic of \( \theta \).
   (c) Find the minimum-variance unbiased estimator of \( \theta \).

3. The joint density function of \( X \) and \( Y \) is given by (20%)
   \[
   f(x, y) = \begin{cases} 
   30xy^2, & x - 1 \leq y \leq 1 - x, \ 0 < x < 1, \\
   0, & \text{elsewhere}, 
   \end{cases}
   \]
   (a) Find the marginal p.d.f of \( X \).
   (b) Find the conditional expectation of \( Y \) given \( X = x \), \( E[Y|X = x] \).

4. We are interested in determining the relationship between daily demand (\( y \)) and the unit price (\( x \)) for a particular item. Consider a simple linear regression model, \( y_i = \beta_1 + \beta_2 x_i + \epsilon_i \). A sample of 10 days demand and associated price resulted in the following data: (30%)
   \[
   \begin{align*}
   \sum x &= 100 \quad & \sum x^2 &= 1254 \quad & \sum xy &= 2546 \\
   \sum y &= 280 \quad & \sum y^2 &= 8180
   \end{align*}
   \]
   (a) Calculate the least squares estimated regression line.
   (b) **Interpret** the estimate coefficients.
   (c) Construct the corresponding ANOVA table. Write down the null and alternative hypotheses corresponding to the \( F \) value.
1. (10 points) Both the European Union and the United States produce cars and television shows. Assume the labor costs (in work hours) required for the production of cars and these shows are follows:

<table>
<thead>
<tr>
<th></th>
<th>European Union</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor required to make a car</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>Labor required to produce a television show</td>
<td>600</td>
<td>400</td>
</tr>
</tbody>
</table>

Assume the region has 240,000 worker hours to divide between producing cars and television shows and assume workers are divided equally between producing cars and TV shows. Please answer the following questions:

(1) Please draw the production possibilities curves for the two regions.
(2) Which region has a comparative advantage in producing cars? Which region has a comparative advantage in producing television shows?

2. (10 points) Two oligopoly firms (A and B) are competing with personal computer market. Each of them can decide to produce high quantity or low quantity. When both firms produce high quantity, each of them earns 2 millions. When both firms produce low quantity, each of them earns 3 millions. When one firm produces high quantity and the other produces low quantity, then the one produces high quantity earns 5 million; while the one produces low quantity earns 1 million. Please answer the following questions:

(1) Please draw the payoff matrix of the game.
(2) Does market equilibrium exist in this game? If yes, what is each firm’s associated strategy and payoff?

3. (10 points) Suppose a gas station at a busy intersection is surrounded by many competitors, all of them sell identical gas. Draw the demand curve the gas station faces, and draw its marginal and average cost curves. Explain the rule of maximizing profit in this situation.

4. (8 points) Assume there is a single firm producing cigarettes, and the marginal cost of producing cigarettes is a constant. Suppose the government imposes a 10-cent tax on each pack of cigarettes. If the demand curve for cigarettes is linear with \( Q = a + bP \) where \( Q \) = output, \( P \) = price, and \( a \) and \( b \) are constant. Will the price rise by more or less than the tax?
5. (12 points) Suppose Anna (A) and Brewster (B) lives next to each other. Anna has all of the wine and all of the garbage. Poor Brewster has none. Please answer the following question:

(1) Anna likes to drink wine but hates garbage, so does Brewster. Please draw Anna’s indifferent curve for wine and garbage.

(2) Please use the Edgeworth box to indicate the exchange behavior of Anna and Brewster. That is, please show the segment of the contact curve in which both players are likely to exchange wine and garbage.

(3) Please indicate the market equilibrium and the relative price of the goods on the Edgeworth box based on the initial endowment.

6. (25 points) Please use the aggregate demand (AD) and aggregate Supply (AS) framework, explain how expansionary monetary policy is supposed to remove an economy from a recessionary gap.

7. (25 points) What is the difference between GDP (gross domestic product) and GNP (gross national product). Also, if GDP rises, does it follow that Real GDP rises, too? Explain your answer.
Part I: Multiple Choice Questions (20%)

1. Which of the following statements is true?
   a. All of the communication channels are existed within the formally authorized channels and are adhered to the organization's hierarchy of authority.
   b. Management by objectives (MBO) systems seldom link employee performance to the organization's strategic goals.
   c. Performance management is the process through which customers ensure that company's activities and outputs contribute to their needs.
   d. Piecework rates are most suited for routine, standardized jobs with output that is easy to measure.

2. Which of the following statements is false?
   a. According to the Maslow theory, once a lower need has been satisfied, it declines in importance, and the next higher need is activated.
   b. According to Herzberg, working conditions, pay, and company policies are examples of motivators.
   c. Feedforward control sometimes aims at preventive control.
   d. Continuous improvement is the implementation of a large number of small, incremental improvements in all areas of the organization and an ongoing basis.

3. The controllable elements of the marketer's task includes all of the following except:
   a. promotion
   b. product
   c. competition
   d. distribution

4. The statement “There is never as much information available as you would like”
   a. does not apply for a successful business venture.
   b. is incorrect in business situations.
   c. demonstrates lack of leadership and commitment.
   d. is the reality of doing business today.

5. A mattress company that advertises its mattress will provide you “With the best night's sleep of your life”, is aiming to provide its customers with:
   a. a value proposition
   b. satisfaction
   c. a superior value chain
   d. total quality marketing

6. When a new product innovation is relatively difficult to understand or use, the characteristic of ________ slows the adoption rate of the new product.
   a. complexity
   b. relative advantage
   c. compatibility
   d. communicability
7. Hewlett-Packard (HP) uses FedEx to handle all of its order fulfillments from HP's retail web site. FedEx warehouses HP inventory in Memphis, Tennessee at one of its hubs. When an order comes into HP, it is automatically transferred to FedEx's Memphis facility. Here the order is packaged and shipping directly to the customers who purchase it. HP and FedEx more than likely:
   a. create customer-centered value chains
   b. do not use a value-delivery network
   c. operate two completely separate value chains
   d. use partner relationship management

8. Business buying behavior differs from consumer buying behavior in that:
   a. business buy products to accomplish a single goal, which varies by industry ad business.
   b. fewer people typically participate in or influence any particular buying decision in the business market.
   c. the demand for business goods and services tends to be more volatile than demand in the consumer market.
   d. the demand for products and services in the consumer market is unaffected by price fluctuations.

9. Which of the following statements about market pioneering (the first one entering the market) is true?
   a. Companies that make industrial goods enjoy significant advantages by not being market pioneers.
   b. Market pioneers are less risky and not as expensive as being market followers.
   c. Customers are wary (cautious, suspicious, distrustful) of pioneering brands.
   d. Market pioneers enjoy significantly higher market share in mature consumer goods markets than market followers.

10. Total quality management (TQM) differs from traditional performance measurement in that it:
    a. has an external, rather than an internal, focus.
    b. is a top-down review process.
    c. assesses both individual performance and the system within which the individual works.
    d. focuses on support decisions about work assignments, training, and compensation.
Part II: Essay Questions

1. Define the terms of efficiency and effectiveness respectively. Can an organization succeed in both simultaneously? Explain your points of view. (10%)

2. An entrepreneur has a new concept for a restaurant chain. The entrepreneur must decide whether to build the chain of restaurant or to offer franchises to independent owners. What are some of the factors that enter into the entrepreneur’s choice between the two alternatives? (15%)

3. Some argue that resources are integrative in nature. What does it mean? Can you explain why should synergy and opportunity costs play into the integration? Give an example of how synergy and opportunity costs can affect decisions managers made. (20%)

4. In designing the advertising for a bottled water product, which would you find more helpful: information about consumer demographics or consumer lifestyles? Give examples of how you would use each type of information. (15%)

5. Which product life-cycle stage, if any, is the most important? Which stage is the riskiest? Which stage offers the greatest profit potential? Which stage seems to need the greatest amount of “hands-on” (practical and concrete) management? Explain the thinking behind each of your answers. (20%)