

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。  
單選題 30% Single choice questions: 3 pts (choose which one is incorrect)

1. The development of future container transportation includes A. setup infrastructure for intermodal container transportation B. formulation of super shipping strategic alliances C. adoption of supersize container vessels D. prosperity of shipping conference E. development of E-Commerce F. trend of merger and acquisition of shipping industry.
2. The changes of shipping environment include A. transportation technology B. variation of economy C. change of trade structure D. demand and supply of vessels and evolution of ports E. variation of interest rates and exchange rates F. volatility of electricity price
3. The direction of future water transportation would be A. strengthen inland transportation for complete services B. engage horizontal integration to improve profit margin C. vertical integration to reach the goal of globalization D. sign long-term contract with main customers to enhance cooperating relationship E. integration of shipping information systems F. carriers operate terminals G. rising awareness of environment protection
4. The factors affecting airline scheduling and operation include A. basic limitations B. financial status C. airplane maintenance D. restrictions of airports E. limitation of airline operation F. limitations of ground handling service G. scheduling planning and coordination H. aircraft assignment and types of schedules
5. The business strategies of 21 centuries airlines include A. make sure corporate mission B. build airline business model C. merge other airlines D. reduce cost as long-term strategy E. yield improvement would be the focus of marketing
6. The features of container transportation include A. simplify package process to reduce transportation expenses B. enhance cargo loading capacity C. suitable for intermodal transportation D. expand transportation market E. Through transportation F. time allowance for cargo handling
7. In the broad sense of air transportation includes A. air carriers B. general aviation C. air freight forwarders D. airport ground handling service E. travel agents F. catering service G. air freight distribution
8. The procedures of fleet planning include A. collect related information B. formulate a fleet planning model C. consider system limitations D. airport evaluation E. initial fleet plan and leverage evaluation F. permission and implementation of fleet plan
9. Aviation business model treats not only flight operations as its core business but also provides wide ranges of aviation business include A. engineering B. cost accounting C. cargo, D. in-flight catering E. ground handling F. informatics
10. The advantages of air transportation include A. high speed B. unrestricted by geography C. options of routes D. comfortable space and service E. reduced travel time

簡答題 15% Compare and contrast (each for 5%)

1. Baumol pricing versus second best pricing
2. Land bridge, mini bridge, and micro bridge
3. Voyage charter, time charter, and bare-boat charter

申論題 55%

1. Read the following short article and answer questions about Uber 25%

“The Ministry of Transportation and Communications said last Friday that it has asked the Ministry of Economic Affairs to revoke the company registration of ridesharing service Uber in Taiwan. The ministry said Uber has registered in Taiwan as an information services business while in reality it is operating a transportation business. It has also hired drivers who do not have commercial driver's licenses, a requirement for local taxi drivers. Since September in 2014, the Directorate General of Highways has issued Uber 92 fines totaling NT\$10.4 million for violating the Highway Act. It has also issued 91 tickets for NT\$4.55 million to drivers who have joined Uber and operate their own cars to carry passengers. The Directorate General of Highways said the number of fines Uber has paid is in the single digits while simultaneously filing administrative petitions challenging the other fines. It knows that as long as it has paid one fine, the government cannot enforce payment of the other fines during the petition period, the agency said.

- a. What is the business model of Uber?
- b. Why does the MOTC try to block Uber services in Taiwan?
- c. What kind of impacts could be caused by Uber?
- d. Do you agree about action adopted by the MOTC? Why or why not?

2. Although mergers and strategic alliances have become a significant model of liner shipping industry to cope with the trend of globalization, the P3 Network from top 3, CMA CGM, Maersk Line and MSC Mediterranean Shipping Company SA, would change the landscape of competition for other alliances and independent shipping firms. 30% (based on the next page TEU and market share table to answer questions)

- a. Analyze the advantages and disadvantages of this P3 horizontal cooperation.
- b. If you were the CEO of Evergreen Line, what kind of strategy would be feasible to adopt?
- c. If you were the chair of the regulatory authorities, would you give the approval of this strategic alliance? Why or why not.

The TEU and the market shares of top liners are listed as the following table for your reference.

| Rank | Shipping carrier                 | TEU       | Share  |
|------|----------------------------------|-----------|--------|
| 1    | APM-Maersk                       | 2,965,964 | 15.70% |
| 2    | Mediterranean Shg Co             | 2,544,328 | 13.40% |
| 3    | CMA CGM Group                    | 1,662,626 | 8.8%   |
| 4    | Hapag-Lloyd                      | 979,834   | 5.2%   |
| 5    | Evergreen Line                   | 952,328   | 5.0%   |
| 6    | COSCO Container L.               | 818,791   | 4.3%   |
| 7    | CSCCL                            | 696,390   | 3.7%   |
| 8    | Hanjin Shipping                  | 610,189   | 3.2%   |
| 9    | MOL                              | 604,032   | 3.2%   |
| 10   | APL                              | 562,346   | 3.0%   |
| 11   | OOCL                             | 536,076   | 2.8%   |
| 12   | Hamburg Süd Group                | 533,285   | 2.8%   |
| 13   | NYK Line                         | 501,416   | 2.6%   |
| 14   | Yang Ming Marine Transport Corp. | 414,067   | 2.2%   |
| 15   | PIL (Pacific Int. Line)          | 374,280   | 2.0%   |
| 16   | Hyundai M.M.                     | 374,115   | 2.0%   |
| 17   | K Line                           | 372,328   | 2.0%   |
| 18   | UASC                             | 365,396   | 1.9%   |
| 19   | Zim                              | 329,593   | 1.7%   |
| 20   | Wan Hai Lines                    | 200,388   | 1.1%   |
| 21   | X-Press Feeders Group            | 112,472   | 0.6%   |
| 22   | HDS Lines                        | 88,608    | 0.5%   |
| 23   | KMTC                             | 88,579    | 0.5%   |
| 24   | SITC                             | 82,166    | 0.4%   |
| 25   | TS Lines                         | 74,573    | 0.4%   |
| 26   | NileDutch                        | 70,638    | 0.4%   |
| 27   | Arkas Line / EMES                | 54,918    | 0.3%   |
| 28   | Quanzhou An Sheng Shg Co         | 53,305    | 0.3%   |
| 29   | Simatech                         | 53,162    | 0.3%   |
| 30   | RCL (Regional Container L.)      | 46,718    | 0.2%   |