※ 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: 共 30 題，每題 2 分，共 60 分; 申論題: 共四題，每題 10 分，共 40 分。合計 100 分。

一、單選題

1. The six important business objectives of information technology are new products, services, and business models; customer and supplier intimacy; survival; competitive advantage; operational excellence; and:

a.　improved flexibility.

b.　improved decision making.

c.　improved business practices.

d.　improved efficiency.

2. Networking and telecommunications technologies, along with computer hardware, software, data management technology, and the people required to run and manage them, constitute an organization's:

a.　data management environment.

b.　networked environment.

c.　IT infrastructure.

d.　information system.

3. Which of the following types of organizing the information systems function would you be most likely to find in a very large, multinational corporation?

a.　As departments within each functional area

b.　As a separate, centralized department

c.　Represented within each major division of the company

d.　None of the above

4. A relocation control system that reports summaries on the total moving, house-hunting, and home financing costs for employees in all company divisions would fall into the category of:

a.　knowledge management systems.

b.　transaction processing systems.

c.　executive-support systems.

d.　management information systems.

5. Which of the following can force a business and its competitors to compete on price alone?

a.　Transparent marketplace

b.　High product differentiation

c.　Poor process efficiency

d.　Demand control

6. According to Leavitt's model of organizational resistance, the four components that must be changed in an organization in order to successfully implement a new information system are:

a.　environment, organization, structure, tasks.

b.　technology, people, culture, and structure.

c.　organization, culture, management.

d.　tasks, technology, people, and structure.

7. A classic ethical dilemma is the hypothetical case of a man stealing from a grocery store in order to feed his starving family. If one used the Utilitarian Principle to evaluate this situation, you might argue that:

a.　stealing the food is acceptable, because the grocer suffers the least harm.

b.　stealing the food is acceptable, because the higher value is the survival of the family.

c.　stealing the food is wrong, because the man would not want the grocery to steal from him.

d.　stealing the food is wrong, because if everyone were to do this, the concept of personal property is defeated.

8. Redesigning and automating business processes can be seen as a double-edged sword because:

a.　the increases in efficiency may be accompanied by job losses.

b.　the increases in efficiency may be accompanied by poor data quality.

c.　the support for middle-management decision making may be offset by poor data quality.

d.　 the reliance on technology results in the loss of hands-on knowledge

9. An example of autonomic computing is:

a.　spyware protection software that runs and updates itself automatically.

b.　software programmed to run on any hardware platform.

c.　cell phones taking on the functions of handheld computers.

d.　programming languages that allow non-programmers to create custom applications.

10. Which competitive strategies can be enhanced through the use of SOAs to connect with partners in a business ecosystem?

a.　Low-cost leadership and product differentiation

b.　Focus on market niche and product differentiation

c.　Low-cost leadership, product differentiation, and strengthening customer and supplier intimacy

d.　Focus on market niche, low-cost leadership, and strengthening customer and supplier intimacy

11. A field identified in a table as holding the unique identifier of the table's records is called the:

a.　primary key.

b.　key field.

c.　primary field.

d.　unique ID.

12. What is the first step you should take in managing data for a firm?

a.　Identify the data needed to run the business.

b.　Cleanse the data before importing it to any database.

c.　Normalize the data before importing to a database.

d.　Audit your data quality.

13. What is a business value of RSS?

a.　Lowers costs and improves efficiency by minimizing Internet access

b.　Enables greater customer intimacy

c.　Enables Internet-based collaboration

d.　Enables company to focus on a market niche

14. In a RFID system, a(n) _____ is electronically programmed with information that can uniquely identify an item, such as an electronic code.

a.　reader

b.　antenna

c.　microchip

d.　transponder

15. Security challenges specifically faced by corporate servers include:

a.　copying of data, alteration of data, and loss of machine.

b.　theft and fraud.

c.　computer viruses, line taps, and hacking.

d.　tapping, sniffing, and message alteration.

16. A firewall allows the organization to:

a.　enforce a security policy on traffic between its network and the Internet.

b.　check the accuracy of all transactions between its network and the Internet.

c.　create an enterprise system on the Internet.

d.　check the content of all incoming and outgoing e-mail messages.

17. You have been asked to implement enterprise software for a manufacturer of kitchen appliances. What is the first step you should take?

a.　Select the functions of the system you wish to use.

b.　Map the company's business processes to the software's business processes.

c.　Map the software's business processes to the company's business processes.

d.　Select the business processes you wish to automate.

18.　Supply chain execution systems:

a.　schedule product subassemblies.

b.　help the company determine how much of a specific product to manufacture in a given time period.

c.　enable the firm to generate demand forecasts for a product.

d.　develop sourcing and manufacturing plans to determine how much of a specific product to manufacture in a given time period.

19. What are the three general business functions that CRM software serves?

a.　ERM, PRM, and CRM

b.　Sales, customer service, and marketing

c.　Sales and marketing, human resources, and finance and accounting

d.　Sales and marketing, customer service, and human resources

20. Compared to digital markets, traditional markets:

a.　have lower search costs.

b.　have higher marketing costs.

c.　have higher delayed gratification effects.

d.　have higher transaction costs.

21. Net marketplaces:

a.　focus on continuous business process coordination between companies for supply chain management.

b.　are geared towards short-term spot purchasing.

c.　are more relationship oriented and less transaction oriented than private industrial networks.

d.　operate as independent intermediaries between buyers and sellers.

22. The set of business processes, culture, and behavior required to obtain value from investments in information systems is one type of :

a.　knowledge culture.

b.　knowledge discovery.

c.　organizational and management capital.

d.　organizational routine.

23. Which of the following are major types of knowledge management systems?

a.　Management information systems, decision support systems, and transaction processing systems.

b.　Enterprise systems, customer support systems, and supply chain management systems.

c.　Database management systems, expert systems, and knowledge work systems.

d.　Enterprise-wide knowledge management systems, knowledge work systems, and intelligent techniques.

24. Which of the following would not be classified as a knowledge work system?

a.　Computer-aided design

b.　3D visualization

c.　Investment workstations

d.　Case-based reasoning

25. In an electronic meeting system, group interaction activities include:

a.　session planning, documenting organizational memory, enhancing personal productivity, and enterprise analysis.

b.　session planning, prioritizing, policy development and organizational memory.

c.　idea generation, evaluating complex problems, and large groups.

d.　idea generation, idea organization, prioritizing, and policy development.

26. MIS typically produce:

a.　new ways of looking at data that emphasize change, flexibility, and rapid response.

b.　fixed, regularly scheduled reports based on data extracted from the organization's TPS.

c.　solutions to semistructured problems appropriate for middle management decision making.

d.　assumptions, responses to ad hoc queries, and graphic representations of existing data.

27. You are an IT project manager for an advertising firm. The firm wishes to create an online survey tool that will be used to survey focus group reactions to products in development. The most important consideration for the firm is being able to offer the tool as soon as possible as a new corporate service. However, you know that many of the senior managers that are business owners of this project have difficulty in understanding technical or software development issues, and are likely to change their requirements during the course of development. What development method would be most successful for this project?

a.　RAD

b.　JAD

c.　End-user development

d.　Prototyping

28. A CSF approach to establishing an enterprise's information requirements is especially suitable for:

a.　distinguishing between individual and organizational objectives.

b.　identifying the key entities and attributes of the organization's data.

c.　understanding how organizational units define critical data.

d.　the development of DSSs and ESSs.

29. The principal capital budgeting models for evaluating information technology projects are the payback method, the accounting rate of return on investment (ROI), the net present value, and:

a.　the future present value.

b.　the internal rate of return.

c.　the external rate of return.

d.　ROPM.

30. One cost of offshore software outsourcing is knowledge transfer costs. This refers to:

a.　the time it takes to transfer work to an outsourcer.

b.　the loss of knowledge that accompanies layoffs when jobs are lost to outsourcers as well as retention bonuses to keep staff working long enough to share their knowledge.

c.　the time, documentation, travel costs, and other costs it takes to ensure the outsourcer understands your business and project requirements.

d.　the time it takes to transfer core data for a system to an outsourcer.

二、申論題:

1. What is mobile commerce? (5%) What are its main applications? (5%)

2. Is it possible to use Technical Analysis based on stock price and volume to devise a decision support system to the benefit of stock market investors? If the answer is 'yes', please explain how? If the answer is 'no', why? (10%)

3. What is big data? What new business opportunities does this new concept imply? Give an example. (10%)

4. What is supply chain? (5%) What is supply chain management? (5%)