ISM3011: Study Guide for Exam 2

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Relevant Topics:

1. Chapters 7 - 10 in the textbook (including case studies chapters 7 + 8)
2. Additional content covered in class (all slides, units 7A – 9B)

Make sure you UNDERSTAND the concepts covered! Don't just learn by heart the definitions in the book. Ask in class if some concepts are unclear!

How to Prepare for the Exam:

1. Re-read your notes for chapters 7 – 10
2. Review the slides for units 7A – 9B and make sure you remember what they describe
3. Pass the self-assessment tests for chapters 7 – 10
4. Make sure you understand the following review questions:
    a. Chapter 7: Questions 1, 2, 3, 4, 5, 9, 14, 16, 17, 18, 22, 23
    b. Chapter 8: Questions 1, 2, 7, 9, 18
    c. Chapter 9: Questions 4, 6, 7
    d. Chapter 10: Questions 1, 4, 13, 17

Self-Assessment:

Make sure you know the answer to the following questions. A huge portion of these questions will be part of the exam, either in the exact way listed below or similar questions!

1. All of the review questions as listed above!
2. How does packet-based transmission work?
    a. What does "routing" mean?
    b. Does the sender know which path his message will take through the Internet?
    c. Do all packets take the same route?
    d. What happens if parts of a message are delayed on their way? Will the recipient be able to assemble the message in the original order? Why?
3. The Internet has a military predecessor, the ARPANET. What was the advantage of its architecture with regard to reliability and availability? (Think of a military strike destroying one computer in the network)
4. What is the difference between the IP address and the domain name of a computer?
5. Is it possible to have multiple domain names for the same IP address?
6. Is it possible to have multiple IP addresses for the same domain name?
7. How does the translation from domain names to IP addresses work?
8. What happens to the IP address if a server is being moved to another location (e.g. to another part of the network)?

9. What happens to the domain name if a server is being moved to another location (e.g. to another part of the network)?

10. What is the difference between an Internet service protocol and a domain name? Name five common Internet service protocols.

11. What is the difference between the Internet and the World Wide Web?

12. What is the World Wide Web?

13. What is HTML and how is it part of the World Wide Web?

14. What does an Internet Browser do with regard to HTML and Web Pages?

15. What is the advantage of the Java programming languages?

16. Is a Java Virtual Machine a compiler or an interpreter?

17. What is the difference between the Internet, an Intranet, and an Extranet? (They all use Internet technology, e.g. TCP/IP, but an Intranet is a closed subnet within the physical borders of a company, whereas an Extranet is like an Intranet but allows selected outsiders access to the network resources, but not the general public).

18. What is the difference between a Web browser and a search engine?

19. Name the three types of Electronic Commerce.

20. Keep in mind that Electronic Commerce is not limited to online shopping, but includes any kind of commercial transaction between companies and/or end-users.

21. Which are the five stages of the multi-stage model for Electronic Commerce? (See unit 8A). Why is it so important to support all stages?

22. What does the term "Back-end Integration" mean? Why is back-end integration so important for successful Electronic Commerce?

23. What is the basic idea of Supply Chain Management? (Exchange of information along the value chain)

24. What is the main purpose of Transaction Processing Systems?

25. What are the advantages and disadvantages of on-line transaction processing vs. batch processing?

26. What is the problem if a company has a huge number of independent TPSs?

27. Why is it difficult to establish links between multiple TPSs in a company?

28. Huge ERP suites nowadays contain TPSs, MISs, and core ERP functionality. What are the advantages of this approach?

29. What is the difference between a heuristics and an optimization approach?

30. Is a Decision Support System usually accessed in a dialog or does it just create a report?

31. What is the difference between MRP and MRPII?

32. From a given Bill of Materials (BOM) and a given Master Production Schedule (MPS), how do you determine the demand of parts and components?