ISM3011: Study Guide for Exam 1

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Relevant Topics:

1. Chapters 1 – 6 in the textbook (including case studies)
2. Additional content covered in class (all slides, units 1A – 6A)

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 1 – 6
2. Review the slides for units 1A – 6A and make sure you remember what they describe
3. Pass the self-assessment tests for chapters 1 – 6
4. Make sure you understand the following review questions:
    a. Chapter 1: Questions 3, 4, 7, 11, 12, 13
    b. Chapter 2: Questions 5, 14, 15, 16
    c. Chapter 3: Questions 1, 4, 5, 7, 8, 10, 11, 12, 15, 16, 20,
    d. Chapter 4: Questions 1, 13, 14
    e. Chapter 5: Questions 1, 4, 5, 8, 11
    f. Chapter 6: Questions 1, 3, 13, 14, 17
5. Make sure you can calculate the Total Cost of Ownership for a given computer device (review the example on the slides for unit 4B).

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. Why is off-the-shelf software a better approach to deal with the inherent changes of the business environment? (remember the cradle building problem and think of timeliness and cost sharing!)
3. Which role does feedback play in systems?
4. Why is immediate feedback important for efficient systems in a dynamic environment?
5. What is a model?
6. Is it a disadvantage of a model that it can only partly reflect the many details of reality?
7. What is the difference between technology infusion and technology diffusion?
8. What is data integration? What are the advantages?

9. Why is redundant data storage in multiple data bases no good approach to prevent loss? Which are the advantages of regular backup copies to a tape but only one operational data base?
10. Why is accuracy of data crucial for automated systems? What happens if you store incorrect facts in a database?
11. List all disadvantages of manual data input! (Think of and understand the impacts with regard to cost, timeliness, and accuracy!)
12. Name common types of CBIS and examples of CBIS.
13. What is the difference between Workflow systems and TPS?
14. What is the value chain?
15. How can SCM support better business decisions along the value chain?
16. What is the difference between continuous improvement and reengineering?
17. Why are proper incentives crucial for continuous improvement?
18. How does the son-father-grandfather backup principle work?
    (see here http://www.dlttape.com/ThreeRs/Reliability/Rotation/Grandfather.htm for details)
19. How can a counter (light gate) be used in a shop to determine whether you should advertise more or change the pricing and product selection in the shop?
20. What is the difference between Assembler and Machine Language?
21. What is Moore's Law and how might it change the need for human labor?
22. What is the difference between a RISC and a CISC processor?
23. Why are hard disks sensitive to shock?
24. What are the key privacy concerns with regard to electronic voting machines?
25. What is the TCO?
26. Is it true that you pay for features that are not required and never used when you buy off-the-shelf software?
27. Why does off-the-shelf-software usually provide better quality?
28. Should a company change its internal processes to those included in off-the-shelf software or should one generally prefer custom-tailored, individual (proprietary) software, developed for one's specific needs? Why?
29. What is Enterprise Application Software? (see pp. 157)
30. What is a key? (see pp. 180-182)
31. What is the primary key? (see pp. 180-182)
32. What is an entity? (see pp. 180-182)