ACS 1803 STUDY QUESTIONS 1 - Part 1

- ** NOTE: The following study questions will be included as part of the mid-term. The highlighted questions (RED) may be included as part of the final.
- 1. If one wants to store business data in a central location in a computer, how does one figure out what data should be stored there so that all persons working in the same area of an organization but in different positions and with different information needs could get appropriate output from this centralized data? Give the first few steps in figuring this out.
- 2. What is a character, a field, a record, a file? Give examples from student data.
- 3. Why is it not a good idea to put all of an organization's data fields into one giant table (having, say, 5000 fields)? Be specific in your answer. Provide an appropriate example.
- 4. What is a relational database?
- 5. How does a database approach to storing data in a computer improve upon the one file approach?
- 6. Explain the basics of the relational data base design.
- 7. What is a database management system (dbms)?
- 8. **Be able to partition data into several tables such that these tables would together make a relational database.
- 9. What is a guery language? What is SQL?
- 10. What is a database management system (dbms)? What does it do? Give an example of such a dbms.
- 11. What steps are required i) to *set up* and ii) to *use* a database of two tables in MS Access (see typed handout on data management)?
- 12. What are two types of output that a dbms such as Access can provide?
- 13. What does it mean to say that a "customized information system" can be built in Access for some specific organizational area? What parts does such an information system consist of?
- 14. *What is the relationship between an information system, a database management system and a database? Explain clearly.

- 15. Explain clearly what is meant by i) using Access directly, as a dbms, to get desired output and ii) using Access indirectly, through an information system, to get desired output?
- 16. "The main way in which computers help business organizations is through information systems". Explain this statement, with an appropriate example.
- 17. What is a data warehouse? For what purpose would it be used? Explain clearly data mining.
- 18. Explain the difference between a centralized database and a distributed database.
- 19. What is data modelling? Why and where is it needed?
- 20. What are data entities? What are attributes? Give examples. What is an entity-relationship diagram? Sketch an example
- 21. What is a REA diagram? Provide an example.
- 22. How does data modelling lead to the design of a database?

End of Part 1
