In your textbook: Ch. 11-13, chapters/readings posted on BB. Supplemental readings/videos/etc.

Binary numbering.
  Valid symbols in numbering systems
  Conversion to binary from decimal
  Conversion from decimal to binary
  Conversion from arbitrary numbering system (base 6, base 23, etc) to decimal

E-Commerce
  B2B
  B2C

Advantages of e-commerce over regular commerce? Explain

Client-server architecture
  What are some types of information that are handled in c-s networks?

What is the internet? the Web?
What is a distributed network? Advantages over spoke-hub model?

internet service provider (ISP)
uniform resource locator (URL)
web browser
hyper-text transfer protocol (HTTP)
hyper-text markup language (HTML)
packets/packet switching
IP addresses
TCP/IP
routers
domain name system/servers (DNS)
bandwidth

What is net neutrality?

How has digital technology changed the collection of data? Examples?
Explain key questions business professionals should be able to articulate about their data collection practices:
  Data relevance
  Data sourcing
  Data quality
  Data quantity
  Data hosting
  Data governance

Transaction Processing Systems
Point of Sale Systems
Other sources of data?

Differences between data, information, and knowledge.
Examples of DBMSs.
Advantages of using DBMS?
What is a data warehouse?
What is datamining? What might we want to learn from it?

Data organization
entities/records
attributes/fields
tables
What are primary and foreign keys? What is their purpose?

zombie computers
bot-nets
data harvesters
distributed denial-of-service attacks (DDoS)
hackers (black-hat, white-hat)
 crackers
hactivists
social engineering
phishing
spear phishing
zero-day exploits
patches
malware
viruses
worms
trojans

Steps you can take to patch technology holes?
Steps you can take to ameliorate human errors?

Website design will be on the exam, but not evaluation methodologies

Questions:
Make a list of the kind of data you might give up when using a cash register, a Web site, or a loyalty card, or when calling a firm’s customer support line. How might firms leverage this data to better serve you and improve their performance?

Discuss the possible consequences of a company having multiple plants, each with a different information system using different part numbers and naming conventions for identical products.

What sorts of exploits would use a botnet? Why would a botnet be useful to cybercriminals?

Why do law enforcement agencies struggle to cope with computer crime?

Discuss the relationship between data collection and information/cyber security.

Give an example of social engineering that you’ve experienced or heard of. How might the victim have avoided being compromised?