

# Info Tech Workbook Sample Final Exam

Student name:

***This exam is closed book, closed notes. Write your answer under each question within the box provided. Your answer must fit in the box. Each numbered question counts for 5 points.***

1. Briefly describe a) what **transaction processing** is, b) what **batch processing** is, and c) how they are different:

a) what transaction processing is:

b) what batch processing is:

c) transaction processing and batch processing are different in these ways:

2. Identify and describe four categories of digital computers based on their size, computing power and the general number of concurrent (simultaneous) users that each can support:

Category of computer	Size/power	Number of concurrent users

3. Describe the significant difference(s) between **application software** and **system software** :

4. Provide a concise description of a modern **database management system** (DBMS) including coverage of what it actually does:

5. In each of the following network topologies is each computer an **active participant** in the transmission of network traffic or is it **passive**? Consider each of the network topologies and briefly state in each case the basis for your answer:

a) bus:

b) star:

c) ring:

d) mesh:

6. Describe the difference between the way that the **traditional telephone system** routes and supports communication between end points and the way that the **Internet** does this:

7. From the point of view of **consumers**, identify and briefly describe **three important advantages** that the digital markets created by the Internet provide:

a) Advantage #1:

b) Advantage #2:

c) Advantage #3:

8. Identify and briefly describe **three intended advantages** of ERP systems:

a) ERP advantage #1:

b) ERP advantage #2:

c) ERP advantage #3:

9. Describe a) how the **waterfall model of system development** orchestrates the processes involved in developing new software and b) the **major specific shortcoming(s)** of it:

a) the waterfall model orchestrates system development in this way:

b) the major shortcoming of the waterfall model are:

10. Describe (a) what **office automation** is and (b) name **three common tasks** that are handled by office automation programs:

a) what office automation is:

b) three common tasks handled by office automation systems are:

11. The **stored program concept** for computing machinery was described by John von Neumann in 1945. Describe a) what this concept states and b) explain what it contributed to making computers flexible and powerful.

a) the stored program concept states that:

b) the stored program concept contributes this to making computer flexible and powerful:

12. Identify and describe each of the **first four generations of computer programming languages** and explain how each is different from the generation that preceded it:

a) first:

b) second:

c) third:

d) fourth:

13. Describe a) the concept of **data stewardship** and b) the **guiding rule** for the ethical use of data accumulated by an organization:

a) data stewardship is:

b) the guiding principle for the ethical use of data:

14. Identify a) what purpose **Bluetooth** and **Wi-Fi** serve, and explain how they are b) similar and how they are c) different:

a) purpose:

b) how Bluetooth and Wi-Fi are similar:

c) how Bluetooth and Wi-Fi are different:

15. Explain a) what a **packet** is and what's in it, and b) its approximate **size** :

a) what a packet is and contains:

b) the approximate size of a packet:

16. Explain what **disintermediation** is in terms of the Internet and digital markets:

17. Describe what needs to happen in an organization for performance improvement to occur when **ERP** is brought in:

18. Discuss what W. W. Royce actually had in mind when he wrote a paper in 1970 that included a description of the **waterfall model of software development** :

19. Explain a) what **software license maintenance** is, what b) **software maintenance** is, identifying c) the different types and kinds of support each type of software maintenance provides:

a) what software license maintenance is:

b) what software maintenance is:

c) the different types of software maintenance and the kind of support each provides:

20. In connection with **JAD** and **RAD**, a) state what the acronym JAD means, b) explain concisely how JAD is done, c) state what the acronym RAD means, d) explain concisely how RAD is done, and e) describe how each confronts the major problem(s) of the waterfall model:

a) what JAD is:

b) how JAD is done:

c) what RAD means:

d) how RAD is done:

e) how JAD and RAD confront the major problem(s) of the waterfall model: