1. Describe what Microsoft had to consider when they decided to use the desktop conceptual model in developing Windows.

- Why did they choose the desktop model?

- What is the deciding factor when trying to choose which conceptual model is best?

Answer. Microsoft had to consider their user base and who they should design Windows for. They chose the desktop model because they realized that not all of their users were experts at the command-line. In fact, most of them were brand-new computer users. Thus, they chose the desktop model to adhere to what the majority of their expected user base was used to. Everyone is familiar with a desktop and the idea of files and folders, so they applied this concept to computers so it would be easier for most people to use. When trying to choose which conceptual model is best, the deciding factor is ultimately your user base. Who are your users, and what do they expect out of your interface?

2. When designing an interface, it's important to get to know the expected user base of your system. What are some things that you should know about your users?

Answer. You should know who your users are, what they're like, and what their tasks, needs, and goals are. You should have enough information to create user personas and a task analysis.

3. How do you know how many user personas to create?

A. create one user persona for each demographic in your user base

B. create one user persona for each user role

C. always create about four or five user personas

D. create one user persona that incorporates all the possible actions that the interface has

Answer. B

4. Choose four of the following five Needfinding techniques, and (a) give a brief description of that technique, (b) give one advantage of using that technique, and (c) give one disadvantage of using that technique.

- Questionnaires

Answer: (a) list of questions for user to answer

(b) get lots of data from large number of people

(c) limited in the complexity of questions that can be asked, most users won't elaborate on their answer choices

- Interviews

Answer: (a) forum for talking to people

(b) get deep into issues of interface

(c) time consuming, infeasible to interview large number of people

- Workshops / Focus Groups

Answer: (a) group interviews

(b) reach a consensus view, highlight areas of conflict

(c) “groupthink”, groups not representative of all problems in interface

- Naturalistic Observation

Answer: (a) spending time observing users, ethnography

(b) gain insights into users' tasks, understand the nature and context

of the tasks

(c) time consuming, too much data

- Studying Documentation

Answer: (a) reviewing procedures and rules in manuals

(b) reliable data, accurate in giving steps involved in activity, gives regulations that govern a task, helps in understanding legislation, provides good background information

(c) may not give a complete view of how an activity/task is done in the “real world”, must be used with another technique

5. Match the usability goals with their description.

\_\_f\_\_ Easy to remember how to use \_\_a\_\_ Effective to use

\_\_b\_\_ Efficient to use \_\_d\_\_ Have good utility

\_\_e\_\_ Easy to learn \_\_c\_\_ Safe to use

a. how well a system does what it should do

b. do common tasks quickly and easily

c. help prevent users from making errors and the confidence to recover from them

d. has the right kind of functionality and supports users in accomplishing tasks

e. how simple it is to figure out advanced features

f. how likely it is someone will know how to use a feature the next time they use it

6. Give an example of an affordance and briefly explain what about it makes it an affordance.

7. Suppose you move to live in a different part of town, and on your way home, you go to your old house rather than your new one because you're always used to going to your old home. What type of slip occurred here?

A. Mode error

B. Description error

C. Loss of activation

D. Capture error

Answer: D

8. Look at the error message below:

An unspecified error occurred!

FileName: PluginTest.js

Method Name: trialErrorFatal

Severity: Fatal

Message: This is a fatal message

Discuss the good and bad aspects of this error message. How would you change this error message to make it better?

9. \_\_\_\_\_'s Law states that you should have 7 +- 2 tabs or items in a drop-down display.

A. Fitts

B. Hick

C. Hick-Hyman

D. Miller

E. None of the above

Answer: E

10. One of Krug's Laws of Usability states that:

It doesn't matter how many times I have to click, as long as each click is a mindless unambiguious choice.

Discuss the pros and cons of designing in this way.

11. There are four types of interfaces that commonly frustrate people: gimmicks, error messages, waiting/upgrading, and appearance. One solution for not frustrating the user with waiting and upgrading is to only force users to upgrade when absolutely necessary. Suppose a user is using Version X of an operating system. Version Y gets released and fixes a somewhat major security bug that was found with Version X. To make the user's computer more secure, it would be a good idea to have them upgrade to Version Y. However, we do not want to frustrate the user. Describe your proposed solution to this problem.

12. One of Don Norman's many quotes about usability states:

Also note that invariably when we design something that can be used by those with disabilities, we often make it better for everyone.

Give an example that illustrates this.

Questions 13 – 15 ask about the scenario below:

TPEGS (Tablet Paperless Exam Grading System) is an interface that professors and teaching assistants use to grade students’ exams. After students take an exam, the professor scans all of the pages into the system, and the system separates the exam into page 1, page 2, etc. so graders can choose which page they want to grade. Graders look at the student’s page and award points if the answers are correct. Once they are finished grading a page, they submit the page and receive another student’s exam page to grade until the grader is finished grading.

Suppose you are asked to improve TPEGS. You want to make it more usable and easier for graders to grade the pages. You may add any functionality to the system that you see fit.

13. Write three usability goals for the improved TPEGS interface.

14. Write three usability requirements for the improved TPEGS interface.

15. Come up with one user persona.

[WillowTree Guest Lecture]

16. Most companies don't bother making their interface usable for people with disabilities. What caused Netflix to add closed captioning to become more accessible?

A. the CEO wanted to add closed captioning

B. through usability testing, Netflix realized their interface wasn't accessible to deaf people

C. Netflix was sued

D. Nothing -- Netflix has always had closed captioning from the beginning

E. None of the above

Answer: C