Chapter Five Multiple Choice Questions

1. Which of the following is not a characteristic of direct manipulation interfaces?
    a. Visibility of the objects and actions of interest.
    b. Menu selection and form fill-in.
    c. Rapid, reversible, incremental actions.
    d. Replacement of typed commands by a pointing action on the object of interest.
2. Augmented reality is _____.
    a. The same thing as virtual reality
    b. A type of dashboard displaying a large volume of information at one time.
    c. An innovation in which users see the real world with an overlay of additional information.
    d. The use of haptic interaction skills to manipulate objects and convert the physical form to a digital form.
3. Drawbacks of direct manipulation include all of the following except _____.
    a. Designs may consume valuable screen space.
    b. Users must learn the meanings of visual representations.
    c. Visual representation may be misleading
    d. The gulf of execution is increased
4. Remote environments are complicated by _____.
    a. The gulf of execution, the gulf of evaluation, and time delays.
    b. Time delays, incomplete feedback, and unanticipated interferences.
    c. Supervisory control, lack of multiple coordinated views, and time delays
    d. Lack of precision, supervisory control, time delays, and gulf of execution.
5. All of the following are good guidelines for use of icons except _____.
    a. Represent the object or action in a familiar and recognizable manner.
    b. Carefully consider three-dimensional icons; they are eye-catching but also can be distracting.
    c. Limit the number of different icons.
    d. Make the icon blend in with its background.
6. Successful virtual environments will depend on smooth integration of what technologies?
    a. Visual display
    b. Head-position and hand position sensing
    c. Force feedback and haptics
    d. All of the above
7. The advantages of WYSIWYG word processors include all of the following except _____.
    a. Users see a partial page of text.
    b. The document is seen as it will appear when printed.
    c. Cursor action is visible and cursor motion is natural.
    d. Immediate display of the results of an action
8. Relative flow dragging allows a user to _____.
    a. Move through a video by dragging an object of interest along its visual trajectory.
    b. See a large volume of information at one time and to directly manipulate it
    c. Be in an immersive environment that blocks out the world.
    d. Avoid complex commands that the might be needed only during a once-a-year emergency.

9. A successful direct-manipulation interface must present _____.
    a. A complex series of user choices.
    b. An appropriate representation or model of reality.
    c. The option for users to enter a long string of commands.
    d. Mixed metaphors so that users don't become bored.

10. Which of the following is <u>not</u> a beneficial attribute of well-designed systems that use direct manipulation?
    a. Novices can learn basic functionality quickly
    b. Experts can work rapidly to carry out a wide range of tasks
    c. Knowledgeable intermittent users can retain operational concepts.
    d. User actions are permanent and cannot easily be undone

11. _____ is the name for the condition that exists when a remotely controlled device transmits its current position, but does it so slowly that it does not indicate its *exact* current position.
    a. Incomplete feedback
    b. Transmission delay
    c. Insufficient feedback
    d. Feedback delay

12. One solution to the problems of the architecture of remote environments is _____.
    a. Discourage the use of remote environments for critical tasks.
    b. Make explicit the network delays and breakdowns as part of the system.
    c. Add animation that allows users to see what happens if they move their input device.
    d. Better user training

13. For virtual environments to be successful, displays must _____.
    a. Approach real time in presenting images to the users.
    b. Use low resolution when objects are not moving
    c. Be head-mounted
    d. Be boom-mounted

14. Allowing surgeons to look at a patient while they see an overlay of an x-ray is an example of _____.
    a. Virtual reality
    b. Visual Display
    c. Augmented Reality
    d. Force Feedback

15. Users have a strong sense of causality when _____.
    a. Interface objects and actions are complex.
    b. Users can select actions rapidly by pointing or gesturing.
    c. Display feedback is delayed.
    d. Inputs produce random results

Chapter 6 Multiple Choice Questions

1. Which is not a good rule for organizing menu contents into meaningful groups and sequences?
    a. Create groups of logically similar items.
    b. Form groups that cover all possibilities.
    c. Make sure that some items overlap.
    d. Use familiar terminology, but ensure that items are distinct from one another.

2. Menus with simple yes/no, true/false, or male/female choices are called _____.
    a. Binary
    b. Tertiary
    c. Secondary
    d. Simple
3. Expert or frequent users who need quick ways to perform simple tasks benefit from all of the following except _____.
    a. Keyboard shortcuts
    b. The ability to "mouse ahead"
    c. Tear-off menus.
    d. Random presentation sequence.
4. When considering the depth/Breadth tradeoff in menus, studies show that _____.
    a. Breadth should be preferred over depth.
    b. Depth should be preferred over breadth.
    c. User experience level is the key factor.
    d. Designers should give users a choice.
5. Which of the following will help alleviate user disorientation when navigating through a menu structure?
    a. Using familiar and consistent terminology
    b. Creating menu shortcuts
    c. Using graphics, fonts, typefaces, or highlighting to indicate menu position
    d. Designing menus to have many deep levels
6. Which of the following is a good idea when designing menus for a small screen device like a phone?
    a. Simplify. Focus on important functions, relegate others to other platforms
    b. Present as many functions as possible
    c. Always sequence menu items in alphabetical order
    d. Don't worry about learnability.
7. The type of menu that displays all of the menu items on the screen at once but shows only items near the cursor at full size is called a _____ menu.
    a. Fisheye
    b. Spatial
    c. Combo
    d. Two-dimensional

8. An alphaslider allows users to _____.
    a. View menu items in context.
    b. Select one item from a large number of categorical items.
    c. Customize menu views and operations
    d. Reduce the number of required cursor movements
9. Which of the following is not a guideline for good form fill-in design?
    a. Group and sequence of fields logically
    b. Make sure that required fields are clearly marked
    c. Allow users to enter any value in a field
    d. Give immediate feedback about errors
10. Which of the following is an example of a custom direct-manipulation graphical widget?
    a. A drop down menu displaying a series of choices
    b. A group of radio buttons allowing users to vote for a candidate
    c. A series of check boxes allowing users to select information to return in a search
    d. A clickable seating map where users select airplane seats
11. Dialog boxes should _____.
    a. Be as large as possible to make sure users notice them.
    b. Be small as is reasonable to minimize the overlap and visual disruption.
    c. Be difficult to make disappear.
    d. Blend into the background
12. Ribbons are _____.
    a. An attempt to replace menus and toolbars with one-inch tabs grouping commands by task.
    b. A type of menu that displays all of the menu items on the screen at once but shows only items near the cursor at full size.
    c. A type of menu that displays the first portion of the menu and an additional menu item, typically an arrow that leads to the next set of items in the menu sequence
    d. Decorative elements of a menu
13. Scrolling menus are _____.
    a. An attempt to replace menus and toolbars with one-inch tabs grouping commands by task.
    b. A type of menu that displays all of the menu items on the screen at once but shows only items near the cursor at full size.
    c. A type of menu that displays the first portion of the menu and an additional menu item, typically an arrow that leads to the next set of items in the menu sequence.
    d. Another name for adaptive menus.
14. Embedded links _____.
    a. Permit items to be viewed in context .
    b. Are distracting to users.
    c. Waste screen space.
    d. Are useful for expert users.

15. Linear menu sequences _____.
    a. Are not effective for novice users performing simple tasks.
    b. Guide the user by presenting one decision at a time.
    c. Require more display space than simultaneous menus.
    d. Give users a good overview of the choices.

Chapter 7 Multiple Choice Questions

1. The operation of computers by people using a familiar natural language to give instructions is called ____
    a. Plain Language Interaction
    b. Natural Language Syntax
    c. Natural Language Interaction
    d. Command Language
2. Command languages are distinguished from menu-selection systems in that _____.
    a. Users must recall notation and initiate actions.
    b. Users view or hear the limited set of menu items and respond.
    c. Command languages are better suited for novice users.
    d. Command-language systems offer the user detailed prompts
3. Which of the following is not a guideline for creating usable abbreviations for a command set?
    a. A simple primary rule should be used to generate abbreviations for most items; a simple secondary rule should be used for those items where there is a conflict.
    b. Abbreviations generated by the secondary rule should have a marker (for example, an asterisk) incorporated in them.
    c. The number of words abbreviated by the secondary rule should be kept to a minimum.
    d. Variable-length abbreviations are preferred over fixed-length ones.
4. Habitability of a user interface refers to _____.
    a. Designs that relieve users from learning new syntactic rules.
    b. How easy it is for users to determine what objects and actions are appropriate.
    c. How quickly users become comfortable with an interface.
    d. Limiting the number of commands and ways of accomplishing a task.
5. Command languages can be attractive in the following situations except _____.
    a. When infrequent use of a system is anticipated.
    b. When users are knowledgeable about the task and interface concepts.
    c. When screen space is at a premium.
    d. When response times and display rates are slow.
6. Natural-language support has shown more success in all the following areas except _____.
    a. Text searching
    b. Dialogue-like interactions
    c. Text generation
    d. Instructional systems.
7. Natural-language interaction and English-language queries have been implemented, but their effectiveness and advantages are limited, mainly because of _____.
    a. Habitability issues
    b. Lack of user knowledge
    c. The limits of artificial intelligence
    d. High cost of implementation

8. Which of the following is not an example of good command-language guidelines?
    a. Create an explicit model of objects and actions.
    b. Choose meaningful, specific, distinctive names.
    c. Provide a consistent structure (hierarchy, argument order, action-object).
    d. Provide multiple ways of accomplishing each task.

9. Which statement about unifying interface concepts or metaphors is true?
    a. They are only useful for novice users
    b. They aid learning, problem solving, and retention
    c. They are an ineffective gimmick
    d. They are only useful for power users

10. All of the following are negative effects of providing excessive numbers of objects and actions except:
    a. More objects and actions take more code to maintain.
    b. More help screens, error messages, and user documentation are required.
    c. Excess functionality slows users' learning
    d. Users are frustrated, because desired functions may not be supported.

11. The basic goals of language design are:
    a. Precision, Compactness, Ease in writing and reading, Completeness, Speed in learning, Simplicity to reduce errors, Ease of retention over time
    b. Creativity, Complexity, Speed in Learning, Ease in reading and writing, Adaptability
    c. Standardization, Ease of retention over time, Quality, Plasticity, and Transparency
    d. Adaptability, Simplicity to reduce errors, Complexity, Ease of reading and writing

12. Which of the following is not a higher-level goal of language design?
    a. Close correspondence between reality and the notation
    b. Convenience in carrying out manipulations relevant to users' tasks
    c. Compatibility with existing notations
    d. Relevance to users' tasks

13. Constraints on a language include all of the following except _____.
    a. The capacity for human beings to record the notation.
    b. Expressiveness to encourage creativity
    c. The match between the recording and the display media (for example, clay tablets, paper, printing presses).
    d. The convenience in speaking (vocalizing).

14. Which of the following is not true of command languages?
    a. They originated with operating-system commands
    b. They are distinguished by their immediacy and by their impact on devices or information.
    c. They do not allow for the creation of macros.
    d. Commands are brief and their existence is transitory

15. An application with textual databases is _____, in which a natural-language parser analyzes the stored text and creates a more structured format.
    a. Extraction
    b. Natural language question answering
    c. Habitability
    d. Text generation

Chapter 8 Multiple Choice Questions

1. All of the following are ways designers have tried to improve on keyboards except:
    a. Dvorak layout
    b. ABCDE style
    c. Non-Haptic style
    d. OrbiTouch keyless keyboard
2. A touchscreen is an example of a _____ device.
    a. Direct Control
    b. User Control
    c. Indirect Control
    d. Non-Control
3. A speech generator is useful for users in all the following situations except when:
    a. They have a long list of data entry items
    b. Their visual channels are overloaded
    c. They must be free to move around
    d. When the environment is too brightly lit, too poorly lit
4. All of the following are strategies for creating an interface optimized for a small screen device input except _____.
    a. Provide support for one-handed interaction.
    b. Place targets towards the center of the device.
    c. Take advantage of every pixel of screen space
    d. Include functionality for as many secondary tasks as possible.
5. Advantages of devices using context-aware computing include all of the following except:
    a. Users get information at their point of need.
    b. Stores can greet customers with directions, coupons, and other useful items when they are nearby.
    c. User privacy is always protected.
    d. It can help users of tablet computers to connect to a printer located in the same room.
6. It has been demonstrated that more rapid data entry can be accomplished if several keys can be pressed simultaneously. This is called _____.
    a. Chording
    b. Haptic feedback
    c. Dual key pressing
    d. QWERTY keyboarding
7. Almost all keyboards use the _____ layout.
    a. ABCDE
    b. QWERTY
    c. Inverted-T arrangement
    d. Virtual
8. Which of the following is not an example of an indirect control pointing device?
    a. Stylus
    b. Mouse
    c. Trackball
    d. Joystick

9. A _____ is a small isometric joystick embedded in keyboards between the letters G and H.
    a. Directional pad
    b. Trackpoint
    c. Mouse
    d. Trackball

10. Users with motor disabilities often prefer _____ over mice.
    a. Touchpads and tablets
    b. Directional pads and trackpoints
    c. Joysticks and trackballs
    d. Touchpads and joysticks

11. Which of the following statements is not true about tactile graphics?
    a. They are produced by using thermal paper expansion machines
    b. They are placed on top of touchscreens.
    c. They are helpful for users with vision impairments
    d. They are an example of Fitt's Law.

12. Tabletop pointing devices are a good choice when _____.
    a. Users have fine-motor challenges.
    b. Collaboration between users is important.
    c. There are a small number of targets.
    d. Pixel-level pointing is required

13. Touchscreen and trackball devices are a good choice for _____.
    a. Public access, shop floor, and laboratory applications.
    b. Drawing and handwriting.
    c. Games
    d. Situations when there are a small number of targets

14. The model of human movement predicting that the time required to rapidly move to a target area is a function of the distance to the target and the size of the target is called _____.
    a. Fitt's Law
    b. The Golden Law
    c. Shneiderman's Law
    d. Norman's Law

15. Devices that allow users to push a mouse or other device and to feel resistance have _____.
    a. Tangible user interfaces
    b. Haptic feedback
    c. Motion sensors
    d. Ubiquitous computing

16. Sensor that allow detect changes in the device's orientation are called _____.
    a. Tangible user interfaces
    b. Motion sensors
    c. Accelerometers
    d. Motion trackers

17. Which of the following does not improve recognition rates for discrete-word–recognition devices?
    a. Quiet environments
    b. Head-mounted microphones
    c. Careful choice of vocabularies
    d. The elimination of training

18. Which of the following is true about speaking commands?
    a. It assists in users' planning and problem solving
    b. It is more demanding of working memory than is the hand/eye coordination needed for mouse pointing.
    c. Error rates are lower for voice users in tasks that required high short-term–memory load.
    d. Studies of users controlling cursor movement by voice confirm faster performance for cursor-movement tasks such as button clicking and web browsing.

19. _____ systems enable users to dictate letters and compose reports verbally for automatic transcription.
    a. Continuous-speech–recognition
    b. Speech generation
    c. Discrete-word recognition
    d. Audiolization

20. Created abstract sounds whose meanings must be learned are called _____.
    a. Auditory icons
    b. Sound icons
    c. Earcons
    d. Sonification

Chapter 10 Multiple Choice Questions

1. What three primary factors influence users' expectations and attitudes regarding response time?
    a. Previous experiences, individual personality differences, and task differences
    b. Skill level, previous experience, and task differences
    c. Individual personality differences, skill level, and type of hardware
    d. Previous experience, user goals, and skill level

2. Which statement is not true about user response time?
    a. Users generally prefer shorter response times.
    b. Longer response times (> 15 seconds) are disruptive.
    c. Shorter response time leads to longer user think time.
    d. A faster pace may increase productivity, but it may also increase error rates.

3. Which statement is not true about short-term, long-term, and working memory?
    a. People have limited capacities for absorbing information.
    b. People store short "chunks" of information in short-term memory.
    c. People use short-term memory in conjunction with working memory for processing information and for problem solving.
    d. Long-term memory processes perceptual input, whereas working memory is used to generate and implement solutions.

4. Under what conditions might a *slower* response rate might be more desirable?
    a. A slower response rate is never more desirable. Users demand speed.
    b. When increasing user think time can lead to better processing of information and fewer errors.
    c. For software developers working on collaborative projects.
    d. When web display variables cannot be controlled.

5. An example of response time choke is _____.
    a. When network installers implement a response-time mechanism by which they could slow down the system when the load was light.
    b. When interface designers maximize the response time of a system that must adapt to different user requirements.
    c. When a home user with a dial-up modem gets frustrated with the slow response time
    d. Users assess their download and upload speeds with web tools.

6. Ways a designer can reduce user frustration include all of the following except:
    a. Increase server capacity, network speed, and network reliability.
    b. Improve user training, online help, and online tutorials.
    c. Redesign instructions and error messages.
    d. Design for expert users first, not for universal usability.

7. What is the effect of modest (small) variations in response time (plus or minus 50% of the mean)?
    a. They have just as big of a negative effect on performance as long delays.
    b. They appear to be tolerable and to have little effect on performance.
    c. Frustration emerges only if response is unusually short.
    d. Users do not respond at all to variations in response time.

8. Well-designed web sites often download _____.
    a. Slowly, to improve accuracy.
    b. Critical information first.
    c. Critical information last.
    d. Eliminate the use of graphics in order to speed information delivery.

9. For repetitive tasks, users prefer and will work more rapidly with _____.
    a. Variable response times
    b. Longer response times
    c. Shorter response times
    d. Linear productivity

10. For complex problems, users will _____.
    a. Typically perform well even as response time grows, as they can use the delays to plan ahead.
    b. Be annoyed by delays of more than a few tenths of a second.
    c. Be deeply concerned with trust, credibility, and privacy.
    d. Pick up the pace of the interface and may fail to fully comprehend the presented material.

11. Automaticity is _____.
    a. Conscious control of information processing.
    b. Automatic and involuntary information processing, occurring without conscious control.
    c. Computer automation of information processing.
    d. When a user performs a complex sequence of actions with a heavy cognitive load.

12. The three initial strategies that can reduce user frustration are _____.
    a. Reduce long-term memory load, provide only very simple interfaces, and decrease automaticity.
    b. Reduce short-term and working memory load, provide information-abundant interfaces, and increase automaticity.
    c. Increase short-term and working memory load, provide information-abundant interfaces, and decrease automaticity.
    d. Increase response times for simple tasks, increase short-term memory load only, increase automaticity.

13. Error rates at shorter response times increase with _____.
    a. Users' frustration levels.
    b. The number of tasks to be accomplished.
    c. Users' ability levels.
    d. The cognitive complexity of the tasks.

14. Which of the following is not true of users?
    a. Novices may exhibit better performance with somewhat slower response times.
    b. Novices prefer to work at speeds slower than those chosen by knowledgeable, frequent users.
    c. When there is little penalty for an error, users prefer to work more slowly.
    d. If users have experienced rapid performance previously, they will expect and demand it in future situations.

15. The size of a chunk of information a person can hold in short-term memory depends on _____.
    a. Their familiarity with the material (knowledge and experience).
    b. Their long-term memory
    c. Their natural cognitive abilities
    d. Their age and gender.

Chapter 11 Multiple Choice Questions

1. The disadvantages associated with anthropomorphic designs include all of the following except:
    a. They may be seen as deceptive, confusing, and misleading
    b. They may give users an erroneous model of how computers work and what the machines' capacities are.
    c. Users often find them annoying.
    d. They cause users to make more frequent errors.

2. Guidelines for good use of color include all of the following except:
    a. Use color conservatively.
    b. Limit the number of colors
    c. Use black and white in graphic displays for greater information density.
    d. Consider the needs of color-deficient users.

3. Which of the following is not a pitfall of color use?
    a. Consistent color-coding may mislead users.
    b. Color pairings may cause problems.
    c. Color fidelity may degrade on other hardware.
    d. Printing or conversion to other media may be a problem.

4. Well-written error messages will do all of the following except:
    a. Indicate what the user needs to do.
    b. Use a positive tone.
    c. State the problem, cause, and solution
    d. Vary visual format and placement

5. Windows that appear change contents, and close as a direct result of user actions in the task domain are called _____.
    a. Contextual windows
    b. Coordinated windows
    c. Direct action windows
    d. User controlled windows

6. The task concept that describes how information objects change based on user actions is called _____.
    a. Unsynchronized scrolling
    b. Browsing
    c. Coordination
    d. Collaboration

7. Synchronized scrolling is a type of coordination where _____.
    a. The scroll bar of one window is coupled to another scroll bar, and action on one scroll bar causes the other window's contents to scroll in parallel.
    b. Coordinated windows can be used to support hierarchical browsing.
    c. Browser tabs allow you to view multiple web pages in the same browser without the need to open a new browser session.
    d. Scroll bars can automatically be turned on and off to conserve screen space.

8. Tabbed browsing is a type of coordination where _____.
    a. Windows can automatically be resized and arranged so that they do not overlap each other
    b. Users can view multiple web pages in the same browser without the need to open a new browser session.
    c. The current state of the display with all the windows and their contents is automatically saved.
    d. Dependent windows are opened simultaneously in a nearby and convenient location.

9. Role centered design _____.
    a. Emphasizes the users' tasks rather than the applications and documents.
    b. Emphasizes users' applications and documents rather than their tasks.
    c. Will not substantially improve support for individuals in managing their multiple roles.
    d. Could reduce distraction while the user is working in a given role.

10. Requirements for a personal role manager include _____.
    a. Support a unified framework for information organization according to users' software.
    b. Support single window actions only for fast arrangement of information.
    c. Allow fast switching and resumption of roles.
    d. Focus users' cognitive resources on interface-domain actions, not task-domain actions.

11. The magnification from the overview to the detail view is called the _____.
    a. Scale factor
    b. Map scale
    c. Detail scale
    d. Zoom factor

12. Web pages or applications that integrate complementary elements from two or more sources are called _____.
    a. Integrations
    b. Mash-ups
    c. Mosh-ups
    d. Open-source

13. Which of the following is not a top-ten mistake of web page presentation of information?
    a. Burying information too deep in a web site.
    b. Overloading pages with too much material.
    c. Providing awkward or confusing navigation.
    d. Putting information in expected places on the page.

14. Web usability for low-vision users can be improved by _____.
    a. Giving users the ability to increase text size
    b. Keeping contrast low
    c. Not allowing the site to be viewed in reverse contrast
    d. Eliminating textual error messages

15. Within a sequence, users should be offered some sense of _____.
    a. When exceptions will likely occur.
    b. System performance and its effect on task completion.
    c. How far they have come and how far they have to go to reach the end.
    d. When errors will be uncorrectable.