UNIT I INTRODUCTION

UNIT II HUMAN COMPUTER INTERACTION

UNIT III WINDOWS

UNIT IV MULTIMEDIA

UNIT V WINDOWS LAYOUT – TEST

TOTAL: 45 PERIODS

TEXT BOOKS

REFERENCE:

SUBJECT CODE: IT2024
SUBJECT NAME: USER INTERFACE DESIGN

UNIT I USER INTERFACE BASICS

PART –A

1. System Study involves
   a. study of an existing system   b. documenting the existing system
   c. identifying current deficiencies and establishing new goals   d. All of the above
2. E primary tool used in structured design is a:
   a. structure chart   b. data-flow diagram   c. program flowchart   d. module
3. ____ one module of the new information system is activates at a time.
4. In Prototyping
   a. BASIC is used   b. COBOL is used   c. 4GLs are used   d. system is documented
5. The step-by-step instructions that solve a problem are called
6. The **approach used in top-down analysis and design** is
   a. to identify the top level functions by combining many smaller components into a single entity
   b. to prepare flow charts after programming has been completed
   c. to identify a top level function and then create a hierarchy of lower-level modules and components.
   d. All of the above

7. Which of the following is not a factor in the failure of the systems developments projects?
   a. size of the company
   b. inadequate user involvement
   c. failure of systems integration
   d. continuation of a project that should have been cancelled

8. A Ring, refers to a record chain, the last of which refers to the first record, in the chain, is called a/an
   a. addressing
   b. location
   c. pointer
   d. loop

9. The **primary tool used in structured design** is a:
   a. data-flow diagram
   b. module
   c. structure chart
   d. program flowchart

10. A problem's _____ will answer the question, "What information will the computer need to know in order to either print or display the output times?"
    a. Input
    b. Output
    c. Processing
    d. Purpose

11. Which of the following statements, is (are) not true for the lease option
    a. Lease charges are lower than rental charges for the same period and are also tax deductible
    b. Lease may be written to show higher payments in early years to reflect the decline in value of the system
    c. Insurance, maintenance and other expenses are included in the rental charge
    d. All of the above

12. The two classifications of inputs are
    a. energies and maintenance
    b. maintenance and waste
    c. maintenance and signal
    d. products and waste

13. Documentation is prepared
    a. at every stage
    b. at system design
    c. at system analysis
    d. at system development

14. System Implementation Phase entails
    a. System check outs
    b. Pilot run
    c. Parallel runs
    d. All of the above

15. Which of the following is not true of the conversion phase of the development life cycle?
    a. the user and systems personnel must work closely together.
    b. steps must be taken to phase out the old system
    c. documentation should be emphasized
    d. the non machine components of the system should be considered

16. Managers who are potential users of the MIS
    a. select the optimum equipment configurations
    b. describe information needs
    c. evaluate alternate equipment configurations
    d. None of the above

17. Positive testing is
    a. running the system with line data by the actual user
    b. making sure that the new programs do in fact process certain transactions according to specifications
    c. is checking the logic of one or more programs in the candidate system
    d. testing changes made in an existing or a new program

18. Data Definition Language (DDL)
    a. describes how data are structured in the data base
    b. specifies for the DBMS what is required; the techniques used to process data
    c. determine how data must be structured to produce the user's view
    d. All of the above

19. In phase 1 of the system development life cycle, which of the following aspects are usually analyzed?
    a. outputs
    b. input (transactions)
    c. controls
    d. All of the above

20. During the maintenance phase
a. System requirements are established  
b. System analysis is carried out  
c. Programs are tested  
d. None of the above  

**Answers:**

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
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**PART –B**  

(2 MARKS)

21. **Define user interface (GUI)**
   
User interface is a collection of techniques and mechanisms to interact with something.

22. **Define graphical user interface (GUI)**
   
An user interface whose primary interaction mechanism is a pointing device is known as graphical user interface (GUI). The pointing device acts as an electronic equivalent to human hand.

23. **Give Some Reasons For Popularity Of GUI.**
   
- There dimensional appearance
- Quick, dynamic, and meaningful,
- Interaction using mouse, joysticks, etc.
- Resembles appeal, charm, and customizability

24. **What do you mean by WIMP?**
   
WIMP means windows, icons, menus, and pointer interface this is another term used to define a graphical user interface GUI.

25. **Define direct manipulation systems (or) give the characteristics of direct manipulation systems.**(NOV/DCE 2012)
   
The term “direct manipulation systems” was coined by shneiderman, to following characteristics.
- Acts as an extension of real world.
- Provides continuous visibility.
- Actions are rapid and incremental with visible display of results.
- Actions are incremental and easily reversible.

26. **What do you mean by indirect manipulation system?**
   
User Interface System which uses words and texts instead of symbols and typing in place of pointing are known as indirect manipulation system.

27. **Give some reasons for using indirect manipulation system.**
   
1. Difficulty in conceptualizing graphically objects and concepts,
2. Limitation in graphics capabilities,
3. Space limitation to place controls.
4. Difficulty in learning to use GUI’s.

28. **Give some advantages of GUI system.**
   
1. Symbols are recognized faster than text. Fosters faster learning.
2. Faster use and problem solving. Easier to remember. more natural

29. **Give some disadvantages of GUI system.**(AU-NOV/DEC-2012)
   
- Greater design complexity.
- Inconsistencies in techniques and terminology due to copyright, legal issues and product differentiation.
- Human comprehension limitations.
- Inefficient for touch typists.

30. **State the conclusion derived from GUI vs other UI styles comparisons.**
   
- Design of an interface and not its style determines ease of use.
- User preference must be considered.
- In majority of cases, world are more meaningful than icons.
Content of graphical screen is critical. GUI success depends on designer skills.

31. List some characteristics of GUI system.
   - Sophisticated visual presentation.
   - Pick and click interaction.
   - Restricted set of interface options.
   - Visualization.

32. Define WYSIWYG.
   What you see is what you get is an acronym used to define GUI system.

33. Objects are classified as:
   Data objects: objects which present information on screen. Container objects: objects that hold other object. Device objects: objects that represents physical objects in the real world.

34. There are three types of container objects:
   - Workplace-storage area for all objects (Ex: desktop)
   - Folders-general purpose containers for long term storage.
Work area- temporary storage folders for objects currently being worked on.

35. Give the MS windows object classifications. (AU-NOV/DEC 2010)
   Objects are classified as:
   - Collection-objects sharing common objects. Constraint-objects with stronger relationship. A change in one is reflected in another (EX: documents, pages)
   - Composite-aggregation of objects identified as an object (Ex: calls make spread sheets).
   - Container-holds another objects. (Ex: folders) Can alter certain properties of objects within it.

36. Define properties or attributes of an object.
   The unique characteristic of an object is known as properties or attributes. Example: font size, text style, back ground/for ground colors etc

37. List the different types of actions that can be applied on an object. (AU-NOV/DEC 2010)
   Commands-actions that manipulate objects. There are executed immediately once executed, they cease to be relevant. Example: open / closing window.

38. List the steps used in property / attributes specification.
   - Select an object.
   - select an actions to apply
   - The actions effect persists until the action is deselected.

39. State the difference between application orientation and object or data orientation.
   *Application orientation employs action: objects approach.
   For example,
   - Action> an application is opened (example: word processor).
   - Objects> file or other objects selected (example: memo).
   *Object orientation employs object: action approach.
   - Object> an object is chosen (example: a memo).
   - Action> an application is selected (example: word processor).

40. Define human computer interface(AU-APR/MAY 2011)
   User interface design is a subset of a field of study called human computer interaction (HCI). Human computer interaction is the study, planning and design of how people and computer work together.

41. List out few principles of UID (AU-APR/MAY 2011)
   - The illusion of manipulable objects
   - Visual order and viewer focus
   - Revealed structure
PART –C

42. Write in brief about the need for human computer interface.
43. Discuss the direct manipulation system with example. (AU-NOV/DEC 2010)
44. Discuss the characteristics and principals involved in web user interface design. AU-NOV-DEC 2012)
45. Briefly explain about the characteristics of graphical user interface. (AU-APR/MAY 2011)
46. Explain in detail about the history of human computer interface and graphical user interface.
47. Explain in detail about the principles of user interface design. (AU-NOV/DEC 2010)
48. Discuss the advantages and disadvantages of graphical system.(AU-NOV-DEC 2012)
49. Explain in details about graphical user interface verses web page design(AU-APR/MAY 2011)

UNIT II INTERFACE DESIGN

PART –A

50. To run the old system and the new system at the same time for a specified period, the system implementation approach used is
a. pilot b. phased c. parallel d. direct

51. The mistake, committed by interchanging two digits in a numeric held, during data entry, is called
a. transposition error b. transcription error c. Beta testing error d. Alpha testing error

52. Decision tree uses
a. pictorial depiction of alternate conditions b. nodes and branches
c. consequences of various depicted alternates d. All of the above

53. Problem analysis is done during
a. system design phase b. systems analysis phase c. before system test d. All the above

54. Top-down programming is
a. a group of related fields b. a map of the programmer's view of the data
c. an approach in which the top module is first tested then program modules are added from the highest level to the lowest level
d. a series or group of components that perform one or more operations of a more complex system

55. A decision table facilitates conditions to be related to
a. actions b. programs c. tables d. operation

56. On the feasibility committee, department representatives serve as:
 a. direct users of the new system b. liaison to their departments
c. ready sources of information d. All of the above

57. A _____ is an outline of a process that keeps develop successful information systems

58. A branch office, location or other data processing centres, where a newly developed system is used under normal operating conditions for several months, to test it, is called
a. beta test data b. alpha test data c. string test data d. system test data

59. An appraisal, of a system's performance after it has been installed, is called system
a. planning b. review c. maintenance d. batch Processing

60. Elapsed time, between initiating a query and receiving a response is called
a. response time b. waiting time c. processing time d. Turnaround time

61. During the system study, the executive vice-president and the other managers exercise their responsibility of
a. planning b. controlling c. directing d. organizing

62. Which of the following is (are) not a tool for Application Prototyping?
63. Data manipulation language (DML)
   a. describes how data are structured in the data base
   b. specifies for the DBMS what is required; the techniques used to process data
   c. determine how data must be structured to produce the user's view  d. All of the above

64. The set of instructions for how to tie a bow is an example of the _____ Structure.
   a. Control  b. Repetition  c. Selection  d. Sequence

65. Which of the following appropriately explains the desirable characteristic of good system design?
   a. Modular approach  b. Proper documentation  c. Conversion  d. Long discussions

66. An example of a hierarchical data structure is
   a. array  B .link list  C .Tree  d. All of the above

67. On a systems flowchart, the online manual keeping of input data is identified by using the
   a. online storage symbol  b. Online keyboard symbol
   c. keeping operation symbols  d. manual operation symbols

68. Which of the following is not a characteristic of good test data
   a. users do not participate at this preliminary stage  b. should be comprehensive
   c. every statement should be executed  d. All of the above

69. In the system concepts, term Integration
   a. implies structure and order
   b. refers to the manner in which each component functions with other components of system.
   c. means that parts of the computer system depend on one another.  d. refers to the holism of systems

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PART –B  

(2MARKS)

70. List the common obstacles in the development path.
   Nobody ever gets it right the first time.  Development is chock-full of surprises.
   Good design requires living in a sea of change.  Designers need good tools.

71. List some common pitfalls in the development path
   No usability testing  No early analysis and understanding of user need and expectations.
   Little or no creation of design element prototypes.
   No common design team vision of user interface design goals.

72. List the five commandments of user interface design. (AU-NOV/DEC 2010,2012)
   Gain a complete understanding of users and their tasks.
   Solicit early and ongoing user involvements.
   Perform rapid prototyping and testing.
   Modify and iterate the design and as much as necessary.

73. Define usability. (AU-NOV/DEC 2010)
   Usability is the capability to be used by humans easily and effectively, where, easily=to a specified level of subjective assessment.
   Effectively=to a specified level of human performance.

74. List some common usability problems.
   i. Ambiguous menus and icons.  ii. Input and direct manipulation limits.
75. State some usability problem in using web interface.
   i. Visual clutter.  
   ii. Impaired information.  
   iii. Inefficient operations.  
   iv. Readability. Impaired information readability.  
   v. Inefficient navigation.

76. Give some practical measures of usability.
    Are people asking a lot of questions or often reaching for a manual?
    Are frequent exasperation responses heard?
    Are there many irrelevant actions being performed?
    Are there many things to ignore?

77. Give some objective measures of usability.
    How effective is the interface?
    How learnable is the interface?
    How flexible is the interface?
    What are the attitudes of the users?

78. Give the composition of a typical design team.
   i. Development specialist.  
   ii. Human factors specialist.  
   iii. Visual design specialist.  
   iv. Usability assessment specialist.  
   v. Documentation expert.  
   vi. Training expert.

79. What are the things a designer must follow to develop a truly usable system? (AU-NOV/DEC 2010)
    Understand how people interact with computer.
    Understand the human characteristics important in design.
    Identify user’s level of knowledge and experience.
    Identify the characteristics of user’s needs, task, and jobs.
    Identify the user’s psychological characteristics.
    Identify the user physical characteristics.

80. Give some psychological responses to poor design.
    i. Confusion.  
    ii. Annoyance.  
    iii. Frustration.  
    iv. Panic or stress.

81. Give some physical responses to poor design.
    i. Abandonment.  
    ii. Partial use.  
    iii. Indirect use.  
    iv. Modification of task.

82. List some important human characteristics in design.
    i. Perception.  
    ii. Memory.  
    iii. Sensory storage.  

83. List some perceptual characteristics.
    i. Proximity.  
    ii. Similarity.  
    iii. Succinctness.  
    iv. Closure

84. What are the system training tools? (AU-APR/MAY 2011)
    System training based on user needs, system conceptual design, system learning goals and system performance goals. Training includes tools such as a formal or video training, manuals, online tutorials, reference manuals, quick reference guides, and online help.

85. What are the structures of menu?
    i. Single menus.  
    ii. Sequential linear menus.  
    iii. Simultaneous menus.  
    iv. Hierarchical menus.  
    v. Connected menus.  
    vi. Event-trapping menus.

PART –C (16 MARKS)

85. Explain the importance of human consideration in UI design with suitable example?(16)

86. What are the important human Characteristics that influence the Interface Design process? Discuss.(16)

87. What is requirement analysis? What are the methods involved in it? What is the impact of it on UI design?(16)
88. Discuss the process involved in understanding the user’s mental model in detail. (8)
89. What are the guidelines to be followed while designing a Conceptual model? Explain.
90. List the qualities that provide a visually pleasing composition for the screen design and discuss. (16)
91. Discuss the problems of the poorly designed screens with examples (8)
92. Draw a properly designed information entry/modification screen and explain the design guidelines that are followed in it. (8)
93. Explain the organization and structure guidelines for
   i. Display/Read-only Screen
   ii. Dedicated Source document (16)
94. Explain the Structure of Menus? (8)
95. (b) Explain the Menu can be phrased? (8) (AU-NOV/DEC 2010)
96. Explain the functions of Menus? (8)
97. Explain briefly about Formatting of Menus? (8)
100. Discuss briefly about Navigating Menus?
101. Explain the Kinds of Graphical Menu?
103. Discuss the structure of the content of the MENU? (AU-NOV/DEC 2012)
104. Write short notes on :
   (AU-NOV/DEC 2012)
   a) Business definition and requirement analysis
   b) Determining basic business function

UNIT III  INTERFACE CHARACTERISTICS

PART – A

105. Indexed-Sequential organization
   a. means storing records in contiguous blocks according to a key.
   b. Stores records sequentially but uses an index to locate records
   c. uses an index for each key type    d. has records placed randomly throughout the file

106. Management’s decision to rent a computer system may be based upon
   a. tax advantages    b. desire to avoid a large one-time payment
   c. operational flexibility in changing hardware    d. None of the above

107. The rule(s) to follow in constructing decision tables is (are):
   a. a decision should be given a name
   b. the logic of the table is independent of the sequence in which conditions rules are written, but the action takes place in the order is which the events occur.
   c. standardized language must be used consistently.    d. All of the above

108. Which are the tools not used for System Analysis

109. Back-up procedure helps in
   a. restoring the operation whenever there is a disk failure
   b. restoring both application and system software whenever there is disk corruption.
   c. restoring the data files whenever there is a system crash    d. All of the above

110. The starting point for development of an MIS is;
   a. identification of business processes that are the essence of the business
   b. a distributed database management
c. the system has a large number of PCs and a LAN.

111. The records in a file or magnetic tape
a. can only be accessed serially  b. have to be arranged in a key sequence
c. are meant for backup  d. cannot be transferred to a disk file

112. Acceptance testing is
a. running the system with line data by the actual user
b. making sure that the new programs do in fact process certain transactions according to Specifications
c. is checking the logic of one or more programs in the candidate systems
d. testing changes made in an existing or a new program

113. The __ symbol is used in a flowchart to represent a step that gets information from the user.

114. Which of the following interface design principles does not allow the user to remain in control of the interaction with a computer
a. allow interaction to interruptible  b. allow interaction to be undoable
c. hide technical internals from casual users.  d. provide 1 defined method for accomplishing a task

Answers:

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PART –B

(2 MARKS)

115. What are the characteristics of windows?

A window is seen to possess the following characteristics:

- A name or title, allowing it to be identified.
- A size in height and width (which can vary).
- A state, accessible or active, or not accessible.
- Visibility- the portion that can be seen.
- A location, relative to the display boundary.
- The function, task, or application to which it is dedicated.

116. List out the advantages of windows.

- Presentation of different levels of information.
- Presentation of multiple kinds of information.
- Sequential presentation of levels of kinds of information.
- Access to different source of information.
- Combining multiple source of information.

117. What are the components of a window? (AU-NOV/DEC 2010)

1. Frame.  2. Title bar.
3. Title bar icon.  4. Windows sizing buttons.
9. Tool box.  10. Command area

118. What are the different windows presentation styles?

1. Tiled windows.  2. Overlapping windows.  3. Cascading windows.

119. What are different types of windows?

Primary windows- used to perform major interaction.
Secondary windows- to obtain or display supplemental information related to the object in the primary windows.
Dialog boxes- to obtain additional information.
Property inspectors- to display the most common or frequency accessed properties.
Message boxes- to provide information about a particular situation or condition.

120. What are the various operation?
   i. Opening a window  
   ii. Sizing a window.  
   iii. Windows placement.  
   iv. Moving a window.  
   v. Resizing a windows  
   vi. Closing a window.

121. What are the characteristics of devices-based controls? (AU-NOV/DEC 2010)
   - To point at an object on the screen.
   - To select the object or identify it as the focus of attention.
   - To drag an object across the screen.
   - To tack or follow a moving object.
   - To enter or manipulate data or information.

122. What are the guidelines for selecting the proper device-based control?
   - Consider the user characteristics and preferences.
   - Consider the characteristics of environment.
   - Consider the characteristics of hardware.
   - Provide flexibility.
   - Minimize eye and hand movements between devices.

123. What are the guidelines for pointer?
   - The pointer:
   - Should be visible at all times.
   - Should contrast well with its background.
   - -should maintain its size across all screen location and during movement.
   - Location should not warp.

124. What are operable controls?
Operable controls are those that permit the entry, selection, changing or editing of a particular value, or cause a command to be performed.

Classes include buttons, text entry / read only, selection, combination entry / selection, and other specialized controls.

125. List some example for device based controls. (AU-APR/MAY 2011)
Device-based controls called input devices.
Example: *track balls *joy stick *graphic tablet *touch screen *light pen *voice *mouse *keyboard.

126. Mention the presentation styles of windows(AU-APR/MAY 2011)
   1. Tiled windows
   2. Overlapping windows
   3. Cascading windows

127. What are the structures of menus? (AU-APR/MAY 2011)
   a) Single menus,
   b) Sequential linear menus
   c) Simultaneous menus
   d) Hierarchical menus
PART –C (16 MARKS)

128. Explain how windows are useful? Explain its Components
   (a) Explain briefly about the presentation styles of window? (8) (AU-NOV/DEC 2012)
   (b) Explain about window management? (8) (AU-NOV/DEC 2010)

129. Discuss briefly about the types of windows?

130. Write a note on Organizing Window Functions? (AU-NOV/DEC 2010)

131. Explain the types of Device Based Controls? (8)

132. Explain the guidelines for selecting the proper device-based controls? (8)

133. Explain the types of Operable Controls? (AU-NOV/DEC 2010)

134. Explain the types of Presentation Controls? (AU-NOV/DEC 2012)

135. Explain types of Controls other than Operable Controls?

136. Explain guidelines for selecting the proper CONTROLS?

137. Explain the types and component window? (AU-APR/MAY 2011)

138. Explain about screen based presentation controls(AU-APR/MAY 2011)

UNIT IV WEB PRESENTATION (1 MARK)

PART –A

139. Which of the following interface design principles reduces the user's memory load?
   a. define intuitive shortcuts    b. disclose information in a progressive fashion
   c. establish meaningful defaults   d. answers a, b and c

140. The reason for reducing the user's memory load is make his or her interaction with the computer quicker to complete.
   a. True    b. False

141. Interface consistency implies that
   a. each application should have its own distinctive look and feel
   b. input mechanisms remain the same throughout the application
   c. navigational methods are context sensitive    d. both b and d

142. If past interactive models have created certain user expectations it is not generally good to make changes to the model.
   a. True    b. False

143. Which model depicts the profile of the end users of a computer system?
   a. design model    b. implementation model    c. user model    d. user's model

144. Which model depicts the image of a system that an end user creates in his or her head?
   a. design model    b. user model    c. system model    d. system perception

145. Which model depicts the look and feel of the user interface along with all supporting information?
   a. Implementation model    b. user model    c. user's model    d. system perception

146. Which of these framework activities is not normally associated with the user interface design processes?
   a. cost estimation    b. interface construction    c. interface validation    d. user and task analysis

147. Which approach (es) to user task analysis can be useful in user interface design?
   a. have users indicate their preferences on questionnaires
   b. rely on the judgement of experienced programmers
   c. study existing computer-based solutions    d. both c and d
148. **Object-oriented analysis techniques** can be used to identify and refine user task objects and actions without any need to refer to the user voice.

- a. True  
- b. False

**Answers:**

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**PART –B**

(2 MARKS)

149. **What do you mean by contextual help?**

Contextual help provides information within the content of a task being performed, or about a specific object being operated upon.

Common kinds of contextual help include help command button, status bar messages, and tool tips.

150. **Describe status bar message.**

Status bar message is an abbreviated, context-sensitive message related to the screen item with focus. Appears in window’s status bar when the pair of mouse is pressed over an item.

151. **State the guidelines for writing status bar message.**

**Guidelines**

- be constructive, not simply descriptive
- be brief, but not cryptic
- being with a verb in the present tense
- if a command has multiple functions, summarize them.
- if a command is disabled, explain why.

152. **State the design guidelines for tool tip.** (AU-NOV/DEC 2010)

- Design guidelines for tool tip
- Make application-specific tool tips consistent with system-supplied tool tips.
- use system color setting for tool tips above to distinguish them

153. **Define tool tip.**

Tool tip is a small pop-up window that appears adjacent to control. This is presented when the pointer is moved over a control a short of time. It is used to display the name of a control when the control has no text label.

154. **What do you mean by task-oriented help?**

Task-oriented help, sometimes called procedural help is presented on a primary window assessed through the help topics browser dialog box on Microsoft windows. It includes a set of command buttons at the top, minimally, a button to display the help topics browser dialog box, a back button to return to the previous topic.

155. **State any four design guidelines for task-oriented help.** (AU-NOV/DEC 2010)

- Provide one procedure to complete a task, the simple and most common.
- Divide procedural instruction into small steps.
- Present each step in the order to be executed.
- Label each step.

156. **State the presentation guidelines for task-oriented help.**

The window should consume a minimum amount of screen space, but be larger enough to present the information without scrolling. Normally, do not exceed 4 steps / window. Use a different window color to distinguish task-oriented help window from other windows.

157. **State the writing guidelines for task-oriented help.**

- Write simply and clearly. Focus on how information, rather then what or why.
158. **Describe reference help.**
Reference help is another form of online documentation. It’s purpose is to present help information that may reference-oriented, documenting the features of a product, or it may serve as a user’s guide to a product.

159. **State the guidelines for designing reference help.**
- Provide a consistent presentation style, following previously presented guidelines.
- Include a combination of contextual help, and task-oriented help as necessary.
- Include text, graphics, animation, video, and audio effects as necessary.
- Make displayed toolbar buttons contextual to the topic being viewed.

160. **State the writing guidelines for reference help.**
- Write simply and clearly. Provide meaningful topic titles.

161. **Define a wizard.**
A wizard is a structured set of screens that gain user through a decision-making or data entry process. Wizards are displayed in a secondary window. The screen includes controls to collect input, and navigation command located at the page bottom.

162. **Give the design guidelines for wizard.**
- Provide screens of exact same size.
- Maintain consistent the locations for all elements.
- Include default or settings for all control when possible.
- Do not require the user to leave a wizard to complete a task.

163. **State the presentation guidelines for wizards.**
- Display the wizard window so it is immediately recognized as the primary point of input.
- Present a single window at one time.
- Do not advance pages automatically.

164. **Give the writing guidelines for wizards.**
- Clearly identify the purpose in title bar.
- Use a conversational rather than instructional style.
- Write simply, concisely, and clearly.
- Use words like “you” and “your”.

165. **Give the design guidelines for hints/tips.**
- Provide guidelines on only 2 or 3 important point.
- Locate the button near where its guidance applies
- Write concisely and to the point.

166. **Define internationalization (AU-APR/MAY 2011)**
Internationalization is the process of isolating culture specific elements from a product. Example: the German text of a program developed in Germany is isolated from the program itself.

167. **Name the various criteria for developing a clear text for web applications. (AU-APR/MAY 2011)**
The unique characteristics of the web, requires a separate set of supplemental guidelines for several web topics, including word usage, error message presentation, text, heading and title writing.

**PART –C**

168. What is Text? Write a note on presenting text and writing text?
169. Write a note on writing Message Box Text?
170. Discuss briefly about text on web pages?
171. Write a note on providing the proper feedback? (AU-NOV/DEC 2010)
172. Write a note on Guidance and Assistance?
173. Explain the types of Disabilities?
175. Write a note on Organizing Guidelines?
176. Discuss briefly about windows Guidelines and Web page Guidelines.
177. narrate in detail creating meaningful graphics, Icons and Images in UID(AU-APR/MAY2011)
178. write in details the icon design guidelines used for user interface (AU-APR/MAY 2011)
179. Elaborate on the Icons, their types and characteristics (AU-NOV/DEC 2012)
180. Discuss any five guidance and assistance mechanisms (AU-NOV/DEC 2012)

UNIT V LAYOUT TESTING

PART –A

181. The computer's display capabilities are the primary determinant of the order in which user interface design activities are completed.
   a. True  
   b. False

182. It is sometimes possible that the interface designer is constrained by environmental factors that mitigate against ease of use for many users.
   a. True  
   b. False

183. One means of defining user interface objects and actions is to conduct a grammatical parse of the user scenario.
   a. True  
   b. False

184. Interface design patterns typically include a complete component-level design (design classes, attributes, operations, and interfaces).
   a. True  
   b. False

185. Several common design issues surface for almost every user interface including
   a. adaptive user profiles  
   b. error handling resolution of graphics
   c. displays system  
   d. both b and
d

186. Add-on help facilities are almost always better received by users than integrated help facilities.
   a. True  
   b. False

187. User interface development systems typically provide several mechanisms for building interface prototypes including
   a. code generation  
   b. drawing tools
   c. input validation  
   d. both c and d

188. Usability questionnaires are most meaningful to the interface designers when completed by
   a. customers  
   b. experienced programmers
   c. product users  
   d. project managers

189. Several usability measures can be collected while observing users interacting with a computer system including
   a. down time for the application  
   b. number of user errors
   c. software reliability  
   d. both b and d

190. An appraisal, of a system's performance after it has been installed, is called system
   a. planning  
   b. review
   c. maintenance  
   d. batch Processing

Answers:

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PART –B

191. List the steps involved in testing.
   - Identifying the purpose and scope of testing. Understanding the importance of testing.
- Developing a prototype. Developing the right kind of set plan
- Designing a test of yield relevant data. Soliciting a test to yield relevant data.
- Providing the proper test facility. Conducting tests and collecting data.
- Modifying the prototypes as necessary. Testing the system again.
- Evaluating the working system.

192. **State the purpose of usability testing.** (AU-NOV/DEC 2010)
- It establishes a communication bridge between developer and users.
- It is used to evaluate a product and validate design decisions.

193. **State the any 4 reasons for the important of usably testing.**
- Developers and users possess different models.
- Developers intuitions are not always correct. There is no average user.
- It’s impossible to predict usability from appearance.

194. **Define a prototype.**
A prototype is a simulation of an actual system that can be quickly created. A prototype may be a rough approximation such as a simple hand-drawn sketch, or it may interactive, allowing the user to key.

195. **Describe hand sketches and scenarios.**
The first, and simplest, prototype is a low-fidelity rough hand-drawn sketch, or mock-up of the screens. The focus is on the design of individual screens, not the interface mechanics.

196. **State some advantages of hand sketch and scenarios.**
- It can be used very early in the development process. No programming skill needed.
- It is suited for use by entire design team. No large investment of time and cost.

197. **State some disadvantages of hand sketch and scenarios.** (AU-NOV/DEC 2010)
- Only a rough approximation. A demonstration, not an exercise.
- Driven by a facilitator, not the user. Limited usefulness for a usability text.

198. **What do you mean interface paper prototype?**
A low fidelity prototype involving use of common office supplies such as post. It notes, transparencies, markers and scissors.

199. **State the advantages of interactive paper prototypes.**
- More illustrative of program dynamics than sketches.
- It can be used to demonstrate the interaction.
- Otherwise, generally the same as for hand-draw sketches and scenarios.

200. **State the disadvantages of interactive paper prototypes.**
- Only a rough approximation.
- A demonstration, not an exercise.
- Driven by a facilitator, not the user.
- Limited usefulness for a usability testing.

201. **What is a programmed façade?**
It provides a realistic surface view of a real program and to illustrate some of the program’s functioning.

202. **State the advantages of programmed facades**
Provide a good detailed specification for writing code. A vehicle for data collection.

203. **State the disadvantages of programmed facades.**
- It may solidify the design too soon.
- More expensive to develop.
- More time-consuming to create.
- Not effective for requirements gathering.

204. **What do you mean by heuristic evaluation?**
In a heuristic evaluation, interface specialists study a system in depth and look for properties, they know, from experience, will lead to problem.

205. **Stat the advantages of heuristic evaluation.**
206. **State the disadvantages of heuristic evaluation.**
   - Evaluators must possess interface design expertise.
   - Difficult to identify system wide structural problems.
   - Difficult to uncover missing exits and interface elements.

207. **What is meant by cognitive walkthrough?**
   In a cognitive work tough, developers walk through an interface in the context of representative user tasks. Individual task actions are examined and the evaluators try to establish a logical reason why the user would perform each examined action.

208. **State the advantages of cognitive walkthrough.**
   i. Do not require a functioning prototype.
   ii. Low cost.
   iii. It can be used to evaluate alternate solutions.
   iv. It can be performed by developers.

209. **State the disadvantages of cognitive walkthrough.**
   Tediuous to perform.
   It may miss inconsistencies and general recurring problem.

210. **What are the four phases of framework to classify user interface for textual search?**
   - formulation (expressing the search) action (launching the search)
   - review of result (reading messages and outcomes)
   - refinement (formulating the next step)

211. **Define visual clutter. How can we avoid visual clutter? (AU-APR/MAY 2011)**
   Maintain low screen density levels
   Maintain distinctive ness of elements

212. **List out the advantages and disadvantages of interactive paper prototypes(AU-APR/MAY2011)**
   **Advantages:**
   - More illustrative of program dynamics than sketches
   - It can be demonstrate the interaction
   - Otherwise, generally the same as for hand-drawn sketches and scenarios
   **Disadvantages:**
   - Only a rough approximation
   - A demonstration, not an exercise
   - Driven for the facilitators, not the user
   - Limited usefulness for usability testing

**PART –C (16 MARKS)**

213. **Write a note on Scope of Testing?**
214. **Write a note on information Search? (AU-NOV/DEC 2010)**
216. **What are the steps for developing and conducting test?**
217. **Explain WWW with example? (AU-NOV/DEC 2010)**
218. **Discuss Briefly about Software tools. (AU-NOV/DEC 2010)**
219. **Explain the factors in choosing among user interface building tools(AU-APR/MAY 2011)**
220. **Discuss the need and importance of prototypes. (AU-NOV/DEC 2012)**
221. **Write a detailed note on: (AU-APR/MAY 2011)**
   a.WWW  b. Hypertext