

**Program: BE Computer Engineering**  
**Curriculum Scheme: Revised 2016**  
**Examination: Final Year Semester VIII**

**Course Code: CSC801 and Course Name: Human Machine Interaction**

**Time: 1 hour**

**Max Marks:50**

- 1 Which of the following is not a part of Gestalt Principles?
  - (a) Proximity
  - (b) Continuity
  - (c) Iconography
  - (d) Similarity
- 2 Which of the following is a form of reasoning?
  - (a) Deductive
  - (b) Relative
  - (c) Subjective
  - (d) Probabilistic
- 3 Which form of memory is concerned with processing ideas and concepts that are not drawn from personal experience?
  - (a) Semantic memory
  - (b) Sensory memory
  - (c) Episodic memory
  - (d) Autobiographical memory
- 4 What does WIMP stand for?
  - (a) Windows, Icons, Menus, Pointers
  - (b) Windows, Interaction, Machine, Protocols
  - (c) Wireless, Information, Mapping, Programs
  - (d) Windows, Information, Maps, Programs
- 5 Which of the following is not a type of sensory memory?
  - (a) Iconic
  - (b) Episodic
  - (c) Echoic
  - (d) Haptic
- 6 According to basic HMI principles, which of the following would not be considered a good option?
  - (a) Hand-typed complex command
  - (b) Keyboard shortcuts
  - (c) Informative feedback
  - (d) Use of colors and icons
- 7 Select an option that is not considered as paradigms in HMI:
  - (a) Time sharing
  - (b) Video Display Units
  - (c) Programming Tools
  - (d) TV
- 8 In which Gestalt principal we group elements that are in the same closed region
  - (a) closure
  - (b) Continuity
  - (c) Proximity
  - (d) Figure/Ground
- 9 Deductive and Inductive are types of what?
  - (a) probability
  - (b) reasoning
  - (c) objective
  - (d) subjective
- 10 In WIMP interaction style 'M' stand for?
  - (a) Macro
  - (b) Menu
  - (c) Mode
  - (d) Master
- 11 \_\_\_\_\_ is the process by which we use the knowledge we have to draw conclusions or infer something new about the domain of interest.
  - (a) Decision making
  - (b) Reasoning
  - (c) Problem solving
  - (d) Probability
- 12 What are the three types of reasoning?
  - (a) Deductive, Productive and inductive
  - (b) Abductive, inductive and deductive
  - (c) Inductive, abductive and reproductive
  - (d) Productive, reproductive and deductive
- 13 What is the second stage in the 'seven stages of action'?
  - (a) Setting plan of action
  - (b) Setting goal of action

- (c) Specifying the action to be performed
  - (d) Evaluation of action
- 14 A careful analysis and reflection of all the incidents or experiences is made. The meaning of an experience is stored in our brain.
- (a) Visceral level
  - (b) Behavioral level
  - (c) Reflective level
  - (d) Lower level
- 15 Which of the following is not a Model human processor?
- (a) The motor system
  - (b) The perceptual system
  - (c) The memory system
  - (d) The cognitive system
- 16 What is a bus?
- (a) It is a communication system that transfers data between components inside a computer, or between computers.
  - (b) It is a very fast computer memory which is used to execute programs and operations efficiently
  - (c) It is a register in which intermediate arithmetic and logic results are stored.
  - (d) It is a combinational digital circuit that performs arithmetic and bitwise operations.
- 17 Simple model of human interaction was proposed by
- (a) Stuart K. Card
  - (b) Card, Moran and Newell
  - (c) Thomas P. Moran
  - (d) Allen Newell
- 18 LCD stands for
- (a) Liquid Crystal Display
  - (b) Liquid Crystal Diode
  - (c) Light Crystal Display
  - (d) Light Crystal Diode
- 19 "Mistakes" and "Slips" are two forms of:
- (a) Errors
  - (b) Goals
  - (c) Evaluation
  - (d) Objectives
- 20 Which of the following is incorrect about human short term memory?
- (a) Short term memory is easily overloaded
  - (b) It is highly susceptible to interference
  - (c) Limited amount of information processing takes place in short term memory
  - (d) Information is transferred from long term memory to short term memory
- 21 The jerky movement of human eyes during reading process is termed as
- (a) regressions
  - (b) fixations
  - (c) saccades
  - (d) suppression
- 22 Which of the given statements correctly defines effectiveness in terms of one of the usability goals?
- (a) It is a very general goal and refers to how good a system is at doing what it is supposed to do.
  - (b) It refers to the way a system supports users in carrying out their tasks.
  - (c) It involves protecting the users from dangerous conditions
  - (d) It involves protecting the users from undesired situations
- 23 By using capitalized words, the reading speed and accuracy
- (a) decreases
  - (b) increases
  - (c) has no effect
  - (d) speed increases and accuracy decreases
- 24 Engineering a user interface involves a quantitative engineering style of working in which measurements are used to judge the quality of interface. Hence \_\_\_\_\_ is appropriate.
- (a) Usability testing
  - (b) Field study
  - (c) Predictive evaluation
  - (d) DECIDE framework
- 25 It is a rudimentary working model of a product or information system, usually built for demonstration purposes or as part of the development process.
- (a) Actual project
  - (b) Draft system
  - (c) Beta
  - (d) Prototype
- 26 The skin uses which of these receptors for haptic interaction
- (a) Thermoreceptors

- (b) Nociceptors
  - (c) Mechanoreceptors
  - (d) Audireceptors
- 27 Kinesthetics involves the use of which one of the following parts
- (a) limbs and joints
  - (b) feet
  - (c) hands
  - (d) skin
- 28 Which of the following types of long term memory describes a record of past events?
- (a) Semantic
  - (b) Episodic
  - (c) Procedural
  - (d) Working
- 29 Socrates is a man, Socrates is mortal, therefore, all men are mortal.  
This statement is an example of
- (a) Deductive reasoning
  - (b) Abductive reasoning
  - (c) Inductive reasoning
  - (d) Empirical reasoning
- 30 \_\_\_\_\_ is particularly useful early in design. It is excellent technique to use with the prototype, because it provides a wealth of diagnostic information.
- (a) Co-discovery
  - (b) Active intervention
  - (c) Splendid research
  - (d) Deliberation
- 31 Which one of the following is not the direct method of requirement gathering?
- (a) Personal Interviews
  - (b) Telephonic Interviews
  - (c) Electronic survey
  - (d) Traditional focus group
- 32 What do you mean by sensory storage?
- Sensory storage is the buffer where the automatic processing of information collected from human senses takes place
- (a)
  - (b) It's a main memory in the computer device where the information is manually stored
  - (c) Storage used in enterprises to store the goods
  - (d) It is the another name of the secondary storage in computing devices.
- 33 The difference between the intentions of the users and what the system allows them to do or how well the system supports those
- (a) Gulf of evaluation
  - (b) Gulf of execution
  - (c) Gulf of Arabia
  - (d) Gulf of experience
- 34 In HCI, users are categorized bases on their skills as
- (a) Low level, Medium level, High level
  - (b) Beginners, Intermediate, Experts
  - (c) Learners, Average, Advanced
  - (d) Entry level, Intermediate level , Skilled
- 35 In the \_\_\_\_\_, the evaluators 'step through' that action sequence to check for potential usability problems
- (a) cognitive walkthrough
  - (b) heuristic evaluation
  - (c) review based evaluation
  - (d) post task walkthrough
- 36 Which of the following is not the advantage of direct method of interviews?
- (a) The interviewer can easily add follow up questions to gain more main information
  - (b) It is the fastest method among all the requirement gathering methods
  - (c) The interviewer can judge the non-verbal behavior of the respondent
  - (d) Provides Multiple channel of communication
- 37 Which evaluation method would you suggest for a qualitative assessment of a design
- (a) Questionnaire
  - (b) Interview
  - (c) Statistical methods
  - (d) Walkthrough
- 38 Collection of techniques and mechanism to interact with something is known as:
- (a) Actions
  - (b) Graphic
  - (c) Icon's
  - (d) Graphical user interface
- 39 Which of the following is golden rule for interface design?

- (a) Place the user in control
  - (b) Reduce the user's requirements
  - (c) Make the good interface
  - (d) User's belief
- 40 Which type of user interface provides input by typing a string in the keyboard ?
- (a) Graphical user interface
  - (b) Command line user interface
  - (c) Natural language interface
  - (d) Menu interface
- 41 Which of the following is an advantage of graphical presentation of information?
- (a) enhances a person's information processing capability
  - (b) increases requirement of perceptual and mental information coding
  - (c) increases load on memory
  - (d) Makes the interface look clumsy
- 42 A GUI is a
- (a) hardware
  - (b) language interpreter
  - (c) software interface
  - (d) operating system
- 43 "Good Design is just cool graphics".
- (a) TRUE
  - (b) FALSE
  - (c) May be
  - (d) Cannot Say
- 44 Which of the following classes of objects hold other objects
- (a) Data
  - (b) Container
  - (c) Content
  - (d) Composite
- 45 Which one of these would not be found in a good HCI?
- (a) Icons that can have specific meanings
  - (b) Common shortcuts, like CTRL+Z for undo.
  - (c) Sounds that convey meanings.
  - (d) A long command line to achieve a function
- Statement 1: User selects an object
- 46 Statement 2: User selects an action to apply on the object
- Which of the following best describes the statements above
- (a) Design specification sequence
  - (b) User specification sequence
  - (c) Attribute specification sequence
  - (d) Interface specification sequence
- 47 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) visual information is organized according to the fancy of the designer
  - (d) input mechanisms change with the application
- 48 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
- 49 "Choose an object, choose an application" describes which of the approaches?
- (a) Application oriented
  - (b) Object oriented
  - (c) Data oriented
  - (d) Action oriented
- 50 Which of the following comprises of an artistic, unrestricted presentation style
- (a) GUI
  - (b) Command Line interface
  - (c) Web interface
  - (d) Menu driven interface
- 51 Which interface would you suggest when user assistance is primary requirement
- (a) GUI
  - (b) Command Line interface
  - (c) Web interface
  - (d) Menu driven interface
- 52 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
- 53 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) only provide one rigidly defined method for accomplishing a task
- 54 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
- 55 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
- 56 Which of the human characteristic is not important for interface designing?
- (a) Perception  
 (b) Visual acuity  
 (c) Human Memory  
 (d) Human Appearance
- Using similar sizes, shapes, or colors for related information and leaving less space between elements of a screen than the space left at the margins talks about which visually pleasing composition
- (a) Irregularity  
 (b) Economy  
 (c) Unity  
 (d) Asymmetry
- 58 What is the opposite of unity considering visually pleasing composition elements
- (a) Irregularity  
 (b) Fragmentation  
 (c) Regular  
 (d) Asymmetry
- 59 Optimize the number of elements on a screen, within limits of clarity reflects \_\_\_\_\_ principle of screen design
- (a) Irregularity  
 (b) Economy  
 (c) Simplicity  
 (d) Asymmetry
- 60 Create aesthetically pleasing windows and groupings of data or text is
- (a) Irregularity  
 (b) Proportion  
 (c) Regular  
 (d) Asymmetry
- 61 Which of the following is not true about pie charts?
- (a) They provide no means of absolute measurement.  
 (b) They cannot represent totals greater than 100 percent  
 (c) They can only represent a fixed point in time  
 (d) Human estimation of relationships is more accurate with angular than with linear representations
- 62 Problem suggested by Howlett(1995) upon her experiences at Microsoft in visual interface design is
- (a) Overuse of too many bright colors  
 (b) Nonstandard presentation of links  
 (c) Annoying use of Flash.  
 (d) Browser incompatibilities
- 63 The objective in design is to minimize \_\_\_\_\_ and maximize \_\_\_\_\_.
- (a) Noise, Signals  
 (b) Signals, Noise  
 (c) Noise, clarity  
 (d) Signals, simplicity
- 64 Internal consistency of organizing elements does not include
- (a) Reflect a person's experiences  
 (b) Operational and navigational procedures  
 (c) Visual identity or theme  
 (d) the organization of components should be same
- Provide a program or document description, type, size, version, estimated loading time, and any special operating requirements, including such things as hardware needed, the required operating system, special software needed, and memory requirements. – Is which category of Web consideration
- 65

- (a) Downloadability
  - (b) Object oriented
  - (c) Maintainability
  - (d) Currency
- 66 Ordering schemas for data and content in user interface design process includes
- (a) Sequence of use
  - (b) Form groups that cover all possibilities.
  - (c) Divide information into units that are logical, meaningful, and sensible
  - (d) Ensure that information that must be compared is visible at the same time
- 67 If an interface element does not have meaning for the user, do not include it in the interface because it is
- (a) Noise
  - (b) Signal
  - (c) Useful
  - (d) Random
- 68 Which of the following Characteristics does Scatterplots have ?
- (a) Use of two or more-dimensional displays of data
  - (b) Maintain inconsistent scale size intervals
  - (c) Provide variable-sized plot points
  - (d) Visually distinguish points of particular significance through a highlighting technique
- 69 Minimizing the alignment points, especially horizontal or columnar by providing standard grid of horizontal or vertical lines to position elements
- (a) Irregularity
  - (b) Economy
  - (c) Simplicity
  - (d) Asymmetry
- 70 Display/ read only screens should be designed to optimize human
- (a) scanning
  - (b) writing
  - (c) knowledge
  - (d) hearing
- 71 With reference to ordering of data and content, which of the following is not a common information ordering scheme
- (a) Conventional
  - (b) Frequency of use
  - (c) Specific to General
  - (d) Sequence of use
- 72 The horizontal and vertical height of a screen in pixels is called
- (a) Mega pixel
  - (b) Screen display
  - (c) Screen resolution
  - (d) Screen orientation
- 73 What is not True about Bar Graphs ?
- (a) Can be used to show a few differences between separate entities
  - (b) Can be used to show differences in a Variable at a few discrete intervals
  - (c) Cannot be arrayed vertically
  - (d) Provide a consistent ordering for related groups of bars
- 74 Which of the following is in the second generation mobile phone standard and technology?
- (a) W-CDMA
  - (b) EDGE
  - (c) T-CDMA
  - (d) UTMS-TDD
- 75 Which of the following is the problem with mobile website?
- (a) They can use all the same tools and techniques you might already use for desktop websites.
  - (b) They can easily support across multiple devices.
  - (c) They offer users a limited access.
  - (d) They can load pages fast without any network latency.
- 76 Which of the following is the most recent platform based on WebKit browser framework, and is used in the Pre line?
- (a) Blackberry
  - (b) iPhone
  - (c) webOS
  - (d) Flash Lite
- 77 What is not part of importance of mobile application?
- (a) Massive chance to grow E-business
  - (b) Easily meets the targeted customers
  - (c) Get official interaction with customers
  - (d) Paid advertisements for your job
- 78 Which of the following is not true for mobile web applications?

- (a) Mobile web applications are mobile applications that do not need to be installed or compiled on the target device.
- (b) Mobile web applications allow users to interact with the contents in real time, where a click or touch performs an action within the current view.
- (c) Device fragmentation was a challenge in mobile web applications.
- (d) Mobile web applications always support native application features, like offline mode, location lookup, file system access, camera and so on.

- 79 Which of the following is not the key feature considered towards creating a native application?
- (a) Accessing the file systems
  - (b) Using Accelerometers
  - (c) Online users
  - (d) Using specific Locations
- 80 Which of the following is true for a mobile design?
- (a) People respond to the visual aesthetic.
  - (b) The colors used, square and rounded corners, gradient and flat backgrounds help improve user experience.
  - (c) Great information design is a great visual design.
  - (d) User's experience is completely dependent on all the facets of the mobile information architecture.
- 81 Which of the following is not true for clickstreams?
- (a) Clickstream is a useful tool for rearchitecting larger websites.
  - (b) Clickstreams are usually historical and used to see the information flaws in the information architecture.
  - (c) Clickstream is a term used to show the behavior on websites, display the order in which the user travel through site's information architecture.
  - (d) Clickstreams are a classic information architecture deliverable.
- 82 The following is not the problem associated with mobile software that can be solved using mobile web application?
- (a) forcing users through a single marketplace
  - (b) ability to update your application
  - (c) Flexibility to fix the broken apps
  - (d) Being promoted correctly to earn huge profits
- 83 Games are considered different from native applications because:
- (a) Games use the similar platform SDKs to create immersive experiences.
  - (b) Games cannot be easily duplicated with web technologies.
  - (c) Porting games to multiple mobile platforms is bit difficult than typical platform-based applications.
  - (d) Games provide a simple and easy way to create an immersive experience.
- 84 Games are considered different from native applications because:
- (a) Games cannot be easily duplicated with web technologies.
  - (b) Porting games to multiple mobile platforms is bit difficult than typical platform-based applications.
  - (c) Games provide a simple and easy way to create an immersive experience.
  - (d) Games use the similar platform SDKs to create immersive experiences.
- 85 Which of the following is not a type of Mobile application media ?
- (a) SMS
  - (b) Native Application
  - (c) Games
  - (d) Utility
- 86 Which one is not cons of Mobile native applications?
- (a) You can charge for applications
  - (b) They cannot be easily ported to other mobile platforms
  - (c) They require certification and distribution from a third party that you have no control over
  - (d) They require you to share revenue with the one or more third parties
- 87 Which one is not the Pro of Mobile native applications?
- (a) They require you to share revenue with the one or more third parties
  - (b) You can charge for applications
  - (c) They are relatively simple to develop for a single platform
  - (d) They offer a best-in-class user experience, offering a rich design and tapping into device features and offline use.
- 88 Which one of the following is not the major element of Mobile Design
- (a) Context
  - (b) Look and Feel
  - (c) Colour
  - (d) Climate
- 89 The user interface for the World Wide Web is called as
- (a) Application
  - (b) Browser
  - (c) Interface
  - (d) Pop-up Window
- 90 The concept by which the understandability of written materials can be measured is
- (a) writability
  - (b) acceptability
  - (c) adjustability
  - (d) readability
- 91 Which of the following is used to display the most frequently accessed object properties
- (a) Property sheet



- (b) Dialog box
- (c) Icon
- (d) Property Inspector

92 An icon appears to move instead of maintaining a static position on the screen is called as

- (a) Animated icon
- (b) Static Icon
- (c) Auditory icon
- (d) Multimedia icon

- Which of the following statement or statements are true about windows:
- 93 Statement 1: A state of window is accessible or active, or not accessible.  
Statement 2: Only active windows can have their contents altered.
- (a) Only Statement 1  
(b) Only Statement 2  
(c) Both the Statements  
(d) Statement 1 is True & Statement 2 is False
- Which of the following statement or statements are true about Choosing the Words for text messages:
- 94 Statement 1: Abbreviations, acronyms and Jargon can be used  
Statement 2: Short and familiar words can be used
- (a) Only Statement 1  
(b) Only Statement 2  
(c) Both the Statements  
(d) Both are False
- Which of the following statement or statements are true about Window Title?
- 95 Statement 1: All windows must have a title located in a centered position at the top  
Statement 2: If presented above a menu bar, display it with a background that contrasts with the bar.
- (a) Only Statement 1  
(b) Only Statement 2  
(c) Both the Statements  
(d) Both are False
- 96 Tiled windows are best suitable for
- (a) Single task activities  
(b) Switching between tasks  
(c) Experienced users  
(d) Tasks requiring lot of window manipulation
- 97 Overlapping windows are best suitable for
- (a) Single task activities  
(b) Switching between tasks  
(c) Novice users  
(d) Display contents are predictable
- 98 The following window is the first one which appears on screen when an action is started
- (a) primary  
(b) secondary  
(c) tertiary  
(d) modal
- 99 Which of the following refers to the resolution of an icon
- (a) syntactics  
(b) semantics  
(c) pragmatics  
(d) value and intensity
- Which of the following statement or statements are true about Colors?
- 100 Statement 1: The long-wavelength colors (red) are commonly referred to as warm  
Statement 2 : The short-wavelength colors (blue) are referred to as cool.
- (a) Only Statement 1  
(b) Only Statement 2  
(c) Both the Statements  
(d) Both are False
- 101 Which of the following guidelines do you suggest for use of video in a web page
- (a) Never automatically download a video into a page  
(b) Create long and elaborate videos  
(c) Provide inaccessible controls  
(d) Use a video when a task is obvious and understood
- Which of the following statement or statements are true about system messages:
- 102 Statement 1: Warning messages call attention to a situation that may be undesirable.  
Statement 2: Critical messages call attention to conditions that require a user action before the system can proceed.
- (a) Only Statement 1  
(b) Only Statement 2  
(c) Both are True  
(d) Statement 1 is True & Statement 2 is False
- 103 The Icon Design Process steps are
- Define purpose, Collect, evaluate, and sketch ideas, Draw in black and white, Test for expectation, recognition, and learning, Test for legibility, Register new icons in the system's registry
- (a)

- (b) Define purpose, Collect, evaluate, and sketch ideas, Test for expectation, recognition, and learning, Test for legibility, Register new icons in the system's registry
  - (c) Define purpose, Draw in black and white, Test for expectation, recognition, and learning, Test for legibility, Register new icons in the system's registry
  - (d) Define purpose, Collect, evaluate, and sketch ideas, Test for expectation, recognition, and learning, Test for legibility
- A color is referred using three properties it possesses: hue, chroma or saturation, and value or intensity,

Statement 1: Hue is the spectral wavelength composition of a color.

- 104 Statement 2: Chroma or saturation is the purity of a color in a scale from gray to the most vivid version of the color.

What is true about the above statements?

- (a) Only Statement 1
- (b) Only Statement 2
- (c) Both are True
- (d) Both are false

- 105 Which color is produced by RGB(255,0,255)?

- (a) Magenta
- (b) Purple
- (c) Yellow
- (d) Green