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Due: Tuesday, Wed Dec 4 at start of class.

Review online notes on HCI under the lectures tab. Total marks: ____ / 20

Place the **most appropriate** answer in the corresponding box below. For example, if the answer to question 1 is A, then write A below the box numbered 1.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Σ

- What does the acronym HCI represent?
 - Highly Cognitive Intuition
 - Human Capital Initiative
 - Human Computer Interaction
 - Hexadecimal Coefficient Index
 - Huge Capacity Imaging
- HCI is a discipline concerned with the ____, evaluation, and ____ of interactive computing systems for human use and with the study of the major phenomena surrounding them.
 - translation, preservation
 - design, implementation
 - theory, practices
 - abstraction, captioning
 - implication, extraction
- Many disciplines contribute to understanding HCI. An example of three of them would be ergonomics, graphic design, and ____
 - anthropology
 - quantum computing
 - organic chemistry
 - corporate law
 - thermodynamics
- How did Bell Labs Research determine the placement of the phone buttons?
 - copied the same layout as existing calculator buttons
 - from its computer modeling programs
 - selected a random draw from all the possible button layout patterns
 - the company president made the final choice of the placement
 - extensive use of user surveys based on their preferences



5. Three of the six goals of HCI are safety, _____, and _____.
 - a. efficiency, repetition
 - b. criteria, utility
 - c. appeal, usability
 - d. privacy, interface
 - e. testing, layout
6. Three of the “Five E’s” of usability are **effective, engaging** and _____.
 - a. earnest
 - b. error tolerant
 - c. editable
 - d. early
 - e. eminent
7. In the Model Human Processor the human memory is divided into _____ and long term memory.
 - a. motor processor
 - b. perceptual processor
 - c. visual stores
 - d. working memory
 - e. cognitive processor
8. Wendy likes to do some studying in the same room where she will write a test. She claims she does better because of the “encoding specificity principle”. What does that mean?
 - a. Long term memory needs more time to retrieve so you need to be more relaxed.
 - b. Memory is best when the cues present at retrieval match those encoded at study.
 - c. Studying is a process for some which requires minimal distraction.
 - d. Memorizing many facts at once is performed in long term memory.
 - e. The ability to commit items to long term memory is constrained when increased task demands introduce more effort.
9. What UI design conclusion can be made from Fitts’ Law?
 - a. Users tend to find it easier to click on larger buttons which are closer to the current cursor position.
 - b. Menus should be designed with many different options.
 - c. Pop-ups containing more amount of text tend to hold the user’s attention.
 - d. Colour choices for screen backgrounds need to be based on a minimal palette.
 - e. The smaller the onscreen button dimension, the faster the user can reach it.

10. Which UI law describes how the user's decision time varies proportionally to the number of different menu options?
- Loomer
 - Hick
 - Stenson
 - Schneiderman
 - Morgan
11. Over time as we age our eye lens tend to weaken, so we can find it difficult to focus on ____
- orange text against blue backgrounds
 - red text against white backgrounds
 - white text against dark backgrounds
 - yellow text against purple backgrounds
 - blue text against dark backgrounds
12. The idea behind Gestalt psychology is that ____.
- we tend to see things as parts of some larger whole rather than in isolation
 - we prefer to memorize smaller chunks of information at a time
 - genetics plays a large part in our ability to learn new tasks
 - a relationship exists between learning process and amount of distraction
 - the eye and mind tend to work independently from each other
13. Three methods of evaluating a user interface are heuristic evaluation (using pre-established guidelines), _____, and back of the envelop modeling.
- consistency modeling
 - captioning
 - documentation
 - outlining
 - user walkthroughs
14. "Each operation is made obvious to the user" – which UI characteristic is this?
- Forcing function
 - Automatic learning
 - Conceptual model
 - Affordance
 - Mapping
15. "User's actions are acknowledged by the system" – which UI characteristic is this?
- Forcing function
 - Affordance
 - Feedback
 - Automatic learning
 - Conceptual model

16. “Prevent the user from making a mistake” – which UI characteristic is this?
- Forcing function
 - Mapping
 - Conceptual model
 - Affordance
 - Feedback
17. The following figure shows the overhead view of a stove with its four elements and controls. Because this design supports a *natural and intuitive usage of the controls*, this demonstrates which UI characteristic?
- Feedback
 - Affordance
 - Forcing function
 - Mapping
 - Automatic learning

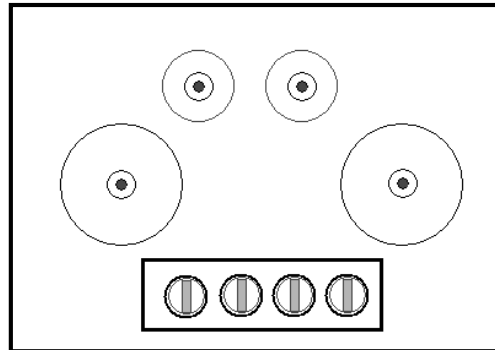


Figure 1. Layout of stove element rings and controls

18. The UI concept of learnability basically means____.
- the interface design of the system should be pleasing to the user
 - error messages should always have links to descriptions
 - users need to continually improve their motor skills
 - use automatic wizards to complete system tasks
 - make it easy for the user to remember how to do tasks
19. What does the Golden Rule about catering to universal usability say?
- Similar things are expected to look and act the same way
 - The interface design must be usable by users from a range of capabilities and proficiency levels
 - Enforcing consistency can lead to design problems
 - Avoid offering feedback whenever possible
 - Let the user know which actions cannot be undone
20. Which one is not a Golden Rule ?
- Permit easy reversal of actions
 - Support user’s “internal locus of control”
 - User’s prefer systems designed with a wide variety of fonts and colours
 - Offer error prevention and simple error handling
 - Reduce short-term memory load