# Sample Questions

Computer Engineering

**Subject Name:**Human Machine Interaction **Semester: VIII**

Multiple Choice Questions

| **Choose the correct option for following questions. All the Questions carry equal marks** | |
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| 1. | The controls on a device panel are designed by the designer in such a way that a user is not able to press or push the buttons since they are either too small or too close. This constraint is called as _____. |
| Option A: | Positional |
| Option B: | Accessibility |
| Option C: | Feedback |
| Option D: | Ergonomics |
| | |
| 2. | Human Memory is viewed as consisting of two components: |
| Option A: | Long Term Memory and Mid Term Memory |
| Option B: | Short Term Memory and Random Access Memory |
| Option C: | Long Term Memory and Short Term Memory |
| Option D: | Long Term Memory and Random Access Memory |
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| 3. | Three basic ways to define a color palette for mobile design are _____. |
| Option A: | Sequential , Adaptive, Inspired |
| Option B: | Irrational , Adaptive, Inspired |
| Option C: | Sequential , Descriptive, Inspired |
| Option D: | Inspired , Adaptive, Influenced |
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| 4. | Mobile platforms those are sold to device makers for nonexclusive distribution on devices are called as_____. |
| Option A: | Open sourced platforms |
| Option B: | Proprietary platforms |
| Option C: | Licensed platforms |
| Option D: | Distributors platforms |
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| 5. | Technically games are really just native applications that use the similar platform SDKs to create immersive experiences. But they are different from native applications for the reason: |
| Option A: | They cannot be easily duplicated with web technologies |
| Option B: | Porting them to multiple mobile platforms is not easier |
| Option C: | They can be easily duplicated with web technologies |
| Option D: | They are not compatible with web technologies. |
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| 6. | Economy in visual pleasing composition refers to- |
| Option A: | Uniformity of elements based on some principle or plan. |

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| Option B: | Stabilization or equilibrium, a midway center of suspension |
| Option C: | Frugal and judicious use of display elements |
| Option D: | Axial duplication |
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| 7. | The most immediate level of processing level that deals with audio, visual and other aspects of a product before experiencing it is : |
| Option A: | Behavioral level |
| Option B: | Reflective level |
| Option C: | Incremental level |
| Option D: | Visceral level |
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| 8. | As an interface designer, to ensure that emphasized screen elements stand out, which of the following techniques you will avoid? |
| Option A: | Higher Brightness |
| Option B: | Underlining |
| Option C: | Screen Clutter |
| Option D: | White Space |
| | |
| 9. | Which of the following is the correct color association? |
| Option A: | Yellow — Go, OK, clear, vegetation, safety. |
| Option B: | Red — Stop, fire, hot, danger |
| Option C: | Green — Cold, water, calm, sky, neutrality. |
| Option D: | Blue — Caution, slow, test. |
| | |
| 10. | The use of pop-up windows is to_____. |
| Option A: | Display additional information when an abbreviated form of the information is the main presentation technique. |
| Option B: | Collect primary information |
| Option C: | Cannot display textual labels for graphical controls. |
| Option D: | Collect the information of hardware system |
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| 11. | _____ is excluded in 'Direct manipulation'. |
| Option A: | The system is portrayed as an extension of the real world. |
| Option B: | Continuous visibility of objects and actions. |
| Option C: | Actions are rapid and incremental with visible display of results. |
| Option D: | Incremental actions are not reversible. |
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| 12. | A pie chart allows you to easily see _____. |
| Option A: | Information about the proportion of parts relative to the whole. |
| Option B: | The total number of each category. |
| Option C: | How much data occurs within a range of numbers. |
| Option D: | The spread of the data. |
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| 13. | The message which calls attention to conditions that require a user action before the system can proceed is : |
| Option A: | Informational message |
| Option B: | Status message |
| Option C: | Critical message |
| Option D: | Warning message |

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| 14. | Java, BREW, S60 comes under which layer of mobile ecosystem- |
| Option A: | Applications |
| Option B: | Application frameworks |
| Option C: | Operating Systems |
| Option D: | Operators |
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| 15. | To reduce screen complexity, Choose correct options. |
| Option A: | Optimize the number of elements on a screen |
| Option B: | Do not use any color on a screen |
| Option C: | Use too many colors on a screen |
| Option D: | Add more alignment points |
| | |
| 16. | Good _____ Model provides Affordance, Mapping and Feedback. |
| Option A: | Physical |
| Option B: | Logical |
| Option C: | User |
| Option D: | Conceptual |
| | |
| 17. | Technically games are really just native applications that use the similar platform SDKs to create immersive experiences. But they are different from native applications for the reason: |
| Option A: | They cannot be easily duplicated with web technologies |
| Option B: | Porting them to multiple mobile platforms is not easier |
| Option C: | They can be easily duplicated with web technologies |
| Option D: | They are not compatible with web technologies. |
| | |
| 18. | A window will have a _____, usually rectangular in shape, to define its boundaries and distinguish it from other windows. |
| Option A: | Title bar |
| Option B: | Frame or border |
| Option C: | Toolbar |
| Option D: | Status bar |
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| 19. | SMS applications can be both _____ or _____. |
| Option A: | free , premium |
| Option B: | paid , premium |
| Option C: | paid , worthless |
| Option D: | free , worthless |
| | |
| 20. | When you move the mouse towards the right pointer it will move towards right. This is an example of……. |
| Option A: | Feedback |
| Option B: | Constraints |
| Option C: | Mapping |
| Option D: | Affordances |
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| 21. | Analogical mapping becomes difficult if domains are _____. |
| Option A: | Semantically different |

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| Option B: | Semantically same |
| Option C: | Logically different |
| Option D: | Syntactically different |
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| 22. | If a dial of the microwave is not able to fit on the washing machine controller panel, the constraint faced by designer is_____. |
| Option A: | Aesthetics |
| Option B: | Physical |
| Option C: | Ergonomics |
| Option D: | Environment |
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| 23. | Find odd one out regarding fundamental principles of interaction given by Don Norman. |
| Option A: | Heuristics |
| Option B: | Signifiers |
| Option C: | Affordances |
| Option D: | Mapping |
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| 24. | User drags a folder and animation appears on screen showing files moving from one location to another. This is an example of: |
| Option A: | Error Prevention |
| Option B: | Visibility of status |
| Option C: | Simplicity |
| Option D: | Consistency |
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| 25. | People's requirements always take precedence over technical requirement.This defines : |
| Option A: | Transparency |
| Option B: | Trade-offs |
| Option C: | Simplicity |
| Option D: | Responsiveness |
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| 26. | Disadvantage of a Web interface includes____. |
| Option A: | Revolutionized Computing |
| Option B: | Faster Interaction access |
| Option C: | User control and slow download time |
| Option D: | Incremental Displays |
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| 27. | The remarkable principle of Mobile 2.0 is : |
| Option A: | Recognising that we are not only the consumers. |
| Option B: | Recognising that we are the Lords of the Mobile market |
| Option C: | Recognising that we are in a new age of consumerization |
| Option D: | Recognising that we are not recognised at all |
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| 28. | Which will be appropriate statistical graphics used to show relationships among individual data points in a two-dimensional array? |
| Option A: | Scatterplots |
| Option B: | Bar graph |

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| Option C: | Pie chart |
| Option D: | Flowchart |
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| 29. | Browsers use colors that succeed on a variety of browsers and platforms, a palette of___ colors. |
| Option A: | 256 |
| Option B: | 216 |
| Option C: | 128 |
| Option D: | 64 |
| | |
| 30. | Which of the following is the correct color association? |
| Option A: | Yellow — Go, OK, clear, vegetation, safety. |
| Option B: | Red — Stop, fire, hot, danger |
| Option C: | Green — Cold, water, calm, sky, neutrality. |
| Option D: | Blue — Caution, slow, test. |
| | |
| 31. | _____ appear in one plane on the screen and expand or contract to fill up the display surface, as needed. |
| Option A: | Cascading windows |
| Option B: | Tiled windows |
| Option C: | Overlapped windows |
| Option D: | Primary window |
| | |
| 32. | Android is an example of _____. |
| Option A: | Open sourced platforms |
| Option B: | Proprietary platforms |
| Option C: | Licensed platforms |
| Option D: | Distributors platforms |
| | |
| 33. | As an interface designer, to ensure that emphasized screen elements stand out, which of the following techniques you will avoid? |
| Option A: | Higher Brightness |
| Option B: | Underlining |
| Option C: | Screen Clutter |
| Option D: | White Space |
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| 34. | In web interface, navigation can be done through_____. |
| Option A: | Menus |
| Option B: | Lists |
| Option C: | Links |
| Option D: | Dialogs |
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| 35. | Which of the following refers to context SMS, Mobile websites, Mobile web widgets, Mobile web applications, Native applications? |
| Option A: | Interface types |
| Option B: | Mobile application medium types |
| Option C: | Mobile elements |
| Option D: | Design strategies |

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| 36. | A field of research called _____, a technology can manipulate our sense of touch. |
| Option A: | Haptics |
| Option B: | Virtual reality |
| Option C: | Augmented reality |
| Option D: | Brain computer interfaces |
| | |
| 37. | Which interaction style is based on the user's memory retention ability? |
| Option A: | Command Language |
| Option B: | Form fill-in |
| Option C: | Menu Selection |
| Option D: | Direct Manipulation |
| | |
| 38. | The within-text links should always be placed ____. |
| Option A: | At the end of the page |
| Option B: | At the beginning or end of paragraphs or sections of text |
| Option C: | Within the text |
| Option D: | Above the text |
| | |
| 39. | To reduce screen complexity, Choose correct options. |
| Option A: | Optimize the number of elements on a screen |
| Option B: | Do not use any color on a screen |
| Option C: | Use too many colors on a screen |
| Option D: | Add more alignment points |
| | |
| 40. | A special type of overlapping window that has the windows automatically arranged in a regular progression is ____ |
| Option A: | Tiled Window |
| Option B: | Cascading Windows |
| Option C: | Primary Window |
| Option D: | Secondary Window |

Descriptive Questions

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| Explain different phases of the goal directed design process. |
| What is Mobile 2.0? Explain the principles of Mobile 2.0. |
| What is statistical graphics? Explain different types of statistical graphics. |
| Explain different phases of the goal directed design process. |
| What is Mobile 2.0? Explain the principles of Mobile 2.0. |
| What is statistical graphics? Explain different types of statistical graphics. |
| Design a user interface for a ‘Save Girl Child’ awareness campaign. Assume appropriate data required for it. |
| Design the web user interface of a monthly expense tracker. Assume suitable data and draw interfaces neatly. |

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| State Electricity Distribution Company wants to provide self help portal for its customers. The portal consists of online meter logging facility, Bill Payments, VDS i.e. Voluntary Deposit Scheme for Bill. Complaint and other Facilities. Being a Subject Matter Expert (SME) provide the detailed analysis along with interface that will be used by people in all Districts. |
| Design a user interface for a 'Save Earth' awareness campaign. Assume appropriate data required for it. |
| Design the web user interface of a vacation planner. Assume suitable data and draw interfaces neatly. |
| Design a user interface to spread awareness about 'Clean India….Green India' |
| Explain techniques of organizing screen elements, ordering of screen data and content. |
| Explain the seven stages of action and three levels of processing. |
| List and explain various types of windows with suitable example. |
| Differentiate between Graphical User Interface and Web User Interface. |
| Discuss different presentation styles of Windows? State advantages and disadvantages of each style. |
| Explain different phases of the goal directed design process. |
| What are general design principles to be considered for User Interface Design? Also give suitable example for the same. |
| Design a user interface for a 'Save Water' campaign. Assume appropriate data required for it. |
| Design a user interface of Career Guidance for $12^{th}$ standard students. It should give information about various fields available, eligibility criteria, future scope, fees etc. |
| Draw and explain layers of mobile ecosystem. |
| Explain importance of Text messages with respect to communication with users. |
| Explain the gulf of execution and gulf of evaluation. |
| Explain Mobile Ecosystem. |
| Write short note on Icons. |
| Explain the guidelines for color selection for web pages. |