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**Gandhi Institute of Engineering and Technology University, Odisha, Gunupur
(GIET UNIVERSITY)**



Ph.D. (Second Semester-Summer) Examinations, April – 2026
23SPPECA2012/23SPPECS2014 – Human Computer Interaction
(CSE/CSA)

Time: 3 hrs

Maximum: 70 Marks

The figures in the right hand margin indicate marks.

Answer ANY FIVE Questions.**(14 x 5 = 70 Marks)****Marks**

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| 1.a. | What do you estimate is the typical capacity of human short-term memory? Discuss with help of example to test for short-term memory. | 7 |
| b. | What is Moore's law? Explain how Moore's law affects the finite processor speed? | 7 |
| 2.a | What is the myth of the infinitely fast machine? Explain in detail. | 7 |
| b. | Find out all you can about natural language interfaces. Are there any successful systems. | 7 |
| 3.a. | Explain about interaction design basics with help of suitable diagram. | 7 |
| b. | How can design rationale benefit interface design and why might it be rejected by design teams? | 7 |
| 4.a | Explain about Norman's Seven Principles for Transforming Difficult Tasks into Simple Ones. | 7 |
| b. | What is three state cognitive model? Explain with suitable examples. | 7 |
| 5.a. | What are the elements of mobile design? Explain in detail. | 7 |
| b. | Discuss the challenges and issues in adopting Speech recognition technology. | 7 |
| 6.a. | What are the mobile application framework? Explain about flash lite and android SDK? | 7 |
| b. | Explain Hick's Law. How does it influence user interface design? Illustrate with an example. | 7 |
| 7. | Write short notes on
(i)Multimodal systems
(ii)Inlays and Virtual pages | 14 |
| 8.a. | Explain the technological considerations in interface design. | 7 |
| b. | Describe the Gulfs of Execution and Evaluation. How can interface design reduce these gulfs? Explain with examples. | 7 |

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