GIET UNIVERSITY, GUNUPUR – 765022

Ph.D. (Second Semester) Examinations, April – 2024

PPECS2015 – Human Computer Interaction

(CSE)

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
1.a.	What do you estimate is the typical capacity of human short-term memory? Explain with help of example to test for short-term memory?	7
b.	Explain in detail about Egronomics.	7
2.a.	What input and output devices would you use for the following systems? For each, compare and contrast alternatives, and if appropriate indicate why the conventional keyboard, mouse and CRT screen may be less suitable.	14

    (i) Portable word processor

    (ii) Tourist information system

    (iii) Tractor-mounted crop-spraying controller

    (iv) Air traffic control system

    (v) Worldwide personal communications system

    (vi) Digital cartographic system.

		Marks
3.a.	What is the myth of the infinitely fast machine?	7
b.	Find out all you can about natural language interfaces. Are there any successful systems?	7
4.a.	Suggest potential ways of improving the interface to avoid a similar problem recurring?	7
b.	Explain QOC design rationale using an example to illustrate.	7
5.a.	Using the web design pattern language to a design for an e-commerce site for a small retail business. How well does the language support the design process?	7
b.	Explain briefly about socio-organizational issues and how does the stakeholder have to consider any particular issues relating to responsibility, security or privacy?	7
6.a.	Explain the various display technologies applicable for small and large displays.	7
b.	What are the mobile application framework? Explain about flash lite and android SDK?	7
7.	What is relationship between software development Life cycle and Human Computer Interaction? Explain with help of diagrams.	14

8.a. Explain Norman's Seven Principles for Transforming Difficult Tasks into Simple Ones. 7

  b. For what applications are these most appropriate? What influence does the social 7
  environment in which you work have on your interaction with the computer? What effect
  does the organization (commercial or academic) to which you belong have on the interaction?

---End of Paper---