

Total No. of Questions : 8]

SEAT No. :

PB-3861

[Total No. of Pages : 2

[6262]-124

T.E. (Information Technology)
HUMAN COMPUTER INTERACTION
(2019 Pattern) (Semester - I) (314444)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answers: Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume Suitable data if necessary.*

Q1) a) What are Norman's seven principles for reducing complex jobs to simple one? [8]

b) How does making a call differ when using: [9]

- i) Smart Cellphone
- ii) Land line phone

How have been these devices been designed to consider the following:

- i) The kind of users
- ii) Types of activity being supported
- iii) Contexts of use

OR

Q2) a) What exactly are mental models and why do they matter in interface design? [5]

b) Explain Low-fidelity and High-fidelity prototypes. [6]

c) Write a short note on the following: [6]

- i) Linguistic Model
- ii) Physical and device Model

P.T.O.

Q3) a) Consider two different ATM machines, one giving away the cash & then ejecting the bank card & the other one ejecting the bank card first & then dispensing the cash. Which is a better interface from interaction design point of view? justify. [9]

b) Explain the principle of Learnability and principle of Flexibility with relevant examples. [9]

OR

Q4) a) Write a Scenario for making an online transaction using any mobile phone-based application. [6]

b) What is design? What is the golden rule of design? Draw the process of interaction design. [6]

c) Draw and explain Model -View- Controller (MVC) framework for any suitable application. [6]

Q5) a) Cognitive Walk through is one of the important techniques with reference to HCI. Justify the statement with a suitable example of your own. [8]

b) Draw and explain User Interface Management System architecture. [9]

OR

Q6) a) How will you apply the DECIDE framework to any online booking system? Explain it with necessary diagram and suitable explanation. [10]

b) What do you mean by evaluation? What are the goals of evaluation? Explain any one category of evaluation in detail. [7]

Q7) a) What do you mean by design thinking? Explain its 5 stages in detail? [9]

b) Differentiate between smart devices and handheld devices. [5]

c) Mention your opinion regarding the future of HCI with an example. [4]

OR

Q8) a) Define the term Ubiquitous computing? Explain it in detail with reference to some suitable examples. [9]

b) Mention a real life example of Augmented Reality and Virtual Reality. [5]

c) What challenges will be faced by designer while designing interfaces for smart wrist bands. [4]
