

Total No. of Questions : 8]

SEAT No. :

PB3782

[6262]-40

[Total No. of Pages : 2

T.E. (Computer)/(Artificial Intelligence and Data Science)

HUMAN COMPUTER INTERFACE

(2019 Pattern) (Semester- I) (310245 B) (Elective- I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 and Q.7 or Q.8.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Make suitable assumption whenever necessary.

Q1) a) What is meant by design? Which are the important points needed to consider for designing? [6]

b) Explain what is mean by human error in detail. [6]

c) List out Eight golden rules. [6]

OR

Q2) a) Explain the process of design using suitable example. [6]

b) Discuss the Software Life cycle used in HCI system using appropriate example. [6]

c) Elaborate Graphical User Interface in Detail. [6]

Q3) a) Elaborate Evaluation framework using following point: [6]

i) Paradigms and Techniques

ii) DECIDE: a framework to Guide Evaluation

b) Elaborate usability assessment in the design process. [6]

c) Explain formative and summative evaluation. [5]

OR

Q4) a) Explain analytic methods and model-based analysis. Write short note on usability specification for evaluation. [6]

b) Elaborate GOMS model. [6]

c) Elaborate universal design principles in detail. [5]

Q5) a) explain vision-based Hand Gesture Recognition System using HCI paradigms. [6]

b) What is mean by paradigm? Explain in detail. [6]

c) What is mean by ubiquitous computing? Which are the applications of it? Explain with suitable example. [6]

OR

P.T.O.

- Q6)** a) Explain the following terms: [6]
i) Sensor-based interaction
ii) Context-aware interaction
iii) Data integrity and data immunity
b) Elaborate the term auditing versus editing using Nielsen heuristic principles. [6]
c) Explain “Five stage framework” using suitable HCI system. [6]

- Q7)** a) Explain Norman’s principles of Design in software. [6]
b) Elaborate designing for mobile and other devices in detail. [6]
c) Write short note on: [5]
i) Mobile form factors
ii) Handheld format apps
iii) Tablet format apps
iv) Mini-tablet format apps
v) Mobile Navigation

OR

- Q8)** a) What is the significance of “navigation and toolbars” in HCI? Explain. [6]
b) Discuss the drawers used in HCI system. Explain item-level drawers in detail. [6]
c) Describe the term “Inter-app Integration” in detail. [5]

