

**Code No: 117DT****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year I Semester Examinations, November/December - 2016****HUMAN COMPUTER INTERACTION****(Information Technology)****Time: 3 Hours****Max. Marks: 75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART- A****(25 Marks)**

- 1.a) What is the importance of good design? [2]
- b) What are the benefits of good design? [3]
- c) Explain Scatter plots with example. [2]
- d) Write the guidelines for building metaphors. [3]
- e) What are the advantages of tiled windows? [2]
- f) What are the functions of menus? [3]
- g) Write the capabilities of Galaxy scripting language. [2]
- h) What is Backus-Naur Form? What is its use? [3]
- i) What are the different key board layouts? [2]
- j) What are novel pointing devices? [3]

**PART-B****(50 Marks)**

- 2.a) What are the differences between GUI and web user interface?
  - b) State various principles considered in the design of Xerox STAR. [5+5]
- OR**
- 3.a) Explain the concept of direct and indirect manipulation.
  - b) What are the general principles of user interface design? [5+5]
- 4.a) Explain the process of determining basic business functions.
  - b) What is the role of screen navigation in screen design? Explain. [5+5]
- OR**
- 5.a) Write the guidelines for designing conceptual models.
  - b) What are the goals of user interface designer? [5+5]
- 6.a) Write about various GUI controls in brief.
  - b) What are the factors that influence the icon's usage? [5+5]
- OR**
- 7.a) Briefly discuss about operable controls.
  - b) Give the uses, advantages and disadvantages of audition. [5+5]
- 8.a) Describe transition diagrams specification method.
  - b) What is the role of user interface architects in building software tools? [5+5]

**OR**

- 9.a) What are the factors considered while choosing user interface building tools?  
b) What are menu selection and dialog-box trees? Explain. [5+5]

- 10.a) Explain the concept of speech generation.  
b) Write about digital photography and scanners. [5+5]

**OR**

- 11.a) Give a brief note about function keys on a keyboard.  
b) Write about attributes display devices and their features. [5+5]

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