Printed Pages: 4                                       NCS-070

(Following Paper ID and Roll No. to be filled in your Answer Books)

**Paper ID : 110670**          Roll No.

# B. TECH.

## Theory Examination (Semester-VI) 2015-16

## HUMAN COMPUTER INTERFACE

*Time : 3 Hours*                                    *Max. Marks : 100*

### Section-A

1.     **Attempt all parts. All parts carry equal marks. Write answer of each part in short.**      (2×10 = 20)

     (a)     Discuss the chronological history of internet.

     (b)     How menu choices can be selected ? Explain      (c) What are unavailable menu choices, toggled menu items and mark toggles?

     (d)     Compare the application oriented approach and object -oriented approach in designing GUI.

     (e)     Discuss the following in respect of designing a website (i) browsing (ii) search facilities.

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(f)   Discuss the history of screen design.

(g)   What is meant by extranet? How is it different from internet?

(h)   Compare the print page design and web page design.

(i)   What are the common message types ?

(j)   Compare 1970's screen and 1990's screen.

## Section-B

2.   **Attempt any five parts. All parts carry equal marks :**
                                          (10×5 = 50)

(a)   Discuss the impact of inefficient screen design on processing time with an example.

(b)   Explain the role of software engineering tools in building the user interface.

(c)   Discuss the important human characteristics which have influence on interface and screen design.

(d)   What are the guidelines for selecting the proper device-based control?

(2)

(e) Explain the details about the factors considered in choosing colors.

(f) Discuss the following object relationship

(a) collection

(b) constraint

(c) composites.

(g) Identify the characteristics and capabilities of the following device-based controls

(a) joystick

(b) track ball

(c) light pen.

(h) Describes the following specification methods :

(a) grammars

(b) state charts.

## Section-C

**Note :** Attempt any two questions from this section. (15×2=30)

3. Give a brief note about icon animation and audition. What are the issues to be considered in combining medium. Explain.

4. Discuss the following :

    (a) Why speech technologies so important in multimodal interaction design, even for normal user? What can be the possible advantages and disadvantages when designing a speech interactive system?

    (b) What are the function keys? Write its advantages?

5. What are the typical characteristics of proper screen based controls? Explain in details.