Name :	
Roll No. :	A Annual O' Envicing and Exchant

Invigilator's Signature : .....

# CS/BCA/SEM-5/BCAE-501B/2012-13 2012

## **HUMAN COMPUTER INTERACTION**

Time Allotted : 3 Hours

Full Marks: 70

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

#### GROUP - A ( Multiple Choice Type Questions )

- 1. Choose the correct alternatives for the following :  $10 \times 1 = 10$ 
  - i) Prototype model is used when
    - a) user requirement is not known
    - b) technical approach is not known
    - c) both (a) and (b)
    - d) none of these.
  - ii) Which one is the video output ?
    - a) Mouse b) Scanner
    - c) Printer d) Pen drive.
  - iii) Which one is the most costly portion in software engineering ?
    - a) Planning b) Organizing
    - c) Coding d) Testing.

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- iv) Data warehousing refers to
  - a) the secure storage of corporate data in a fireproof vault
  - b) the integration of multiple large database into a single repository
  - c) a concept that is not longer practical due to the pace of technological change
  - d) none of these.
- v) Which testing is done by client ?
  - a) Unit testing b) Intermigration testing
  - c) Alpha testing d) Beta testing.
- vi) Which of the following is not a factor affecting decision making ?
  - a) Technology b) Information
  - c) Competition d) Software.
- vii) For software certification which is needed ?
  - a) ISO b) CMM
  - c) both (a) and (b) d) none of these.

viii) Data structure used to implement heuristic search is

- a) binary tree b) any tree
- c) both (a) and (b) d) none of these.

CS/BCA/SEM-5/BCAE-501B/ 2012-13 Wilcoh By which colour combination we can ix) make colour display? i or a Red, Black, White a) b) Blue, Green, Yellow Red. Black. Blue Red. Green. Blue. c) d)

x) Which one is the costly memory ?

- a) RAM b) HDD
- c) Cache memory d) Register.

### GROUP – B ( Short Answer Type Questions )

Answer any *three* of the following.  $3 \times 5 = 15$ 

- 2. What is visual perception ? Explain with pictorial representation.
- 3. What is the difference between error and exception ?
- 4. What is trackball ? Explain.
- 5. What is simulator ? Why is simulator needed ?
- 6. Explain the structure of memory.

#### **GROUP - C** ( Long Answer Type Questions )

Answer any *three* of the following.  $3 \times 15 = 45$ 

7. a) What is the difference between STM and LTM ? 5

3

b) What is the basic architecture of a computer system ?

10

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- 8. 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.  $3 \times 5$ 
  - a) Portable word processor
  - b) Tourist information system
  - c) Tractor-mounted crop-spraying controller
  - d) Air traffic control system
  - e) Worldwide personal communications system
  - f) Digital cartographic system.
- 9. Discuss the ways in which a full-page word processor is or is not a direct manipulation interface for editing a document using Shneiderman's criteria. What features of a modern word processor break the metaphor of composition with pen ( or typewriter ) and paper ?
- 10. What is process of design? Explain with some example.