



Name :

Roll No. :

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.



- 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.



ix) By which colour combination we can make colour display ?

- a) Red, Black, White b) Blue, Green, Yellow
c) Red, Black, Blue d) Red, Green, Blue.

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.

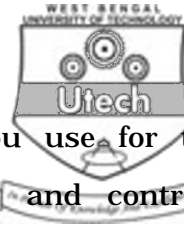
GROUP - C

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

10



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 × 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.

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