



**TAKORADI
TECHNICAL
UNIVERSITY**

FACULTY OF APPLIED SCIENCE

DEPARTMENT OF COMPUTER SCIENCE

END OF SECOND SEMESTER EXAMINATIONS 2021/2022 ACADEMIC YEAR

COURSE TITLE

**HUMAN COMPUTER
INTERFACE**

**COURSE
CODE**

BIT 232

CANDIDATE'S INDEX NUMBER

CLASS & YEAR

BTECH ICT 2

DURATION

2HRS 30MIN

SECTION A-MULTIPLE CHOICE (30MARKS)

INSTRUCTIONS

ANSWER ALL QUESTIONS. Carefully select the most appropriate answer for each question on the question paper

1. The following are the key components of HCI except
 - a. Human
 - b. Programming
 - c. Interaction
 - d. Computer
2. The major senses include the following except
 - a. Brain
 - b. Sight
 - c. Hearing
 - d. Smell
3. The human component of HCI basically refers to ____
 - a. Interaction
 - b. Computer
 - c. System
 - d. User
4. ____ is the transparent fibrous front coat of the eye
 - a. Pupil
 - b. Iris
 - c. Retina
 - d. Cornea
5. Input in human is mainly through ____
 - a. Effectors

- b. Digestive system
 - c. Senses
 - d. brain
6. The following are examples of effectors
- a. Fingers
 - b. Limbs
 - c. All of the above
 - d. None of the above
7. Output in the human is mainly by ____
- a. Effectors
 - b. Digestive system
 - c. Senses
 - d. Brain
8. ____ is the blood vessel-rich tissue behind the retina that nourishes the retina
- a. Pupil
 - b. Retina tissue
 - c. Choroid
 - d. Iris
9. Haptic feedback mainly has to do with ____
- a. Touch
 - b. Feel
 - c. All of the above
 - d. None of the above
10. ____ acts as a scratch-pad for temporary recall
- a. Long-term memory
 - b. Episodic memory
 - c. Short-term memory
 - d. Explicit memory
11. Text entry devices in a computer includes
- a. Camera
 - b. Keyboard
 - c. LCD
 - d. CPU
12. Aural stimuli is sensed by ____ sensory channel
- a. Haptic memory
 - b. Echoic memory
 - c. Iconic memory
 - d. None of the above
13. Consider the following statements:
If it is Thursday then we have HCI
It is Thursday
Therefore, we have HCI
 The statement above falls under which type of reasoning?
- a. Inductive reasoning
 - b. Deductive reasoning
 - c. Abductive reasoning
 - d. Problem solving

14. Which of the following is not true of the Gestalt theory?
- a. All problem-solving employs deductive reasoning
 - b. Problem solving is both productive and reproductive
 - c. Productive draws on insight and restructuring problem
 - d. Attractive but not enough evidence to explain insight, etc.
15. Some interaction styles include the following except
- a. Menus
 - b. Natural language
 - c. Point and click
 - d. Gazing
16. The golden rule of design is that
- a. Have a good plan
 - b. Plan a good design
 - c. Understand your materials
 - d. Understand your mind
17. The main focus of any interaction is to _____
- a. Know your users
 - b. Talk to your user
 - c. Understand your role
 - d. Understand your skill
18. Know your user means the following except
- a. What they look like
 - b. Who are they?
 - c. Talk to your user
 - d. Watch your user
19. The part of the system that interacts with the immediate environment is called _____
- a. Environment
 - b. Boundary
 - c. Feedback
 - d. Interface
20. Short term memory in the computer can be likened to
- a. Flash drive
 - b. RAM
 - c. Hard disk
 - d. None of the above
21. Long term memory in the computer can be likened to
- a. Cookies
 - b. Hard disk
 - c. Temp file
 - d. None of the above
22. The following are key terms of interaction except
- a. Intention
 - b. Task
 - c. Reasoning
 - d. Goal
23. An organised assembly of components is called a _____

- a. behavior
 - b. system
 - c. interface
 - d. boundary
24. A computer system that operates in a predictable manner is described as a _____
- a. Probabilistic system
 - b. Deterministic system
 - c. Closed system
 - d. Open system
25. Using output signals to modify input signals is called _____
- a. Control
 - b. Environment
 - c. Time lag
 - d. Feedback loop
26. Elements of the design model includes the following except
- a. Conceptual design
 - b. Data design
 - c. Interface design
 - d. Architectural design
27. The following fall in the class of human error
- a. Forgetfulness
 - b. Slips
 - c. All of the above
 - d. None of the above
28. Design tools includes
- a. Brush for painting
 - b. Tools for layout
 - c. Decoration
 - d. None of the above
29. Mistakes from humans may have the following characteristics except
- a. Right intention
 - b. Poor skill
 - c. Inattention
 - d. Change to aspect of skilled behavior
30. The vocal system forms part of _____
- a. Visual perception
 - b. Effectors
 - c. Aural sensors
 - d. None of the above

SECTION B:
ANSWER ALL (70MARKS)

1.

- a. Explain the following terms:
 - i. Deductive reasoning (3marks)
 - ii. Abductive reasoning (3marks)
 - iii. Inductive reasoning (3marks)
- b. State Moore's law. (4marks)
- c. Name and discuss the components of HCI. (12marks)
- d. Explain the 5 major senses and their respective organs. (5marks)

2.

- a. Briefly describe sensory memory? (4marks)
- b. State and explain the three channels of sensory memory. (3marks)
- c. Draw the structure of the model of the memory and label fully. (8marks)
- d. Explain short term memory? (5marks)

3.

- a. Briefly explain the following:
 - i. Batch processing (3marks)
 - ii. Ergonomics (3marks)
- b. List the process of design (4marks)
- c. Explain the term scenarios in relation to HCI? (4marks)
- d. List and explain the stages of the model of the software life cycle fully. (6marks)