



UNIVERSITY COLLEGE TATI (UC TATI)

FINAL EXAMINATION QUESTION BOOKLET

COURSE CODE	: BCS 3253
COURSE	: HUMAN COMPUTER INTERACTION
SEMESTER/SESSION	: 2 - 2024/2025
DURATION	: 3 HOURS

Instructions:

1. This booklet contains **5** questions. Answer **ALL** the questions.
2. All answers should be written in answer booklet.
3. Write legibly and draw sketches wherever required.
4. If in doubt, raise your hands and ask the invigilator.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

THIS BOOKLET CONTAINS 5 PRINTED PAGES INCLUDING COVER PAGE

HUMAN COMPUTER INTERACTION (BCS 3253)

QUESTION 1

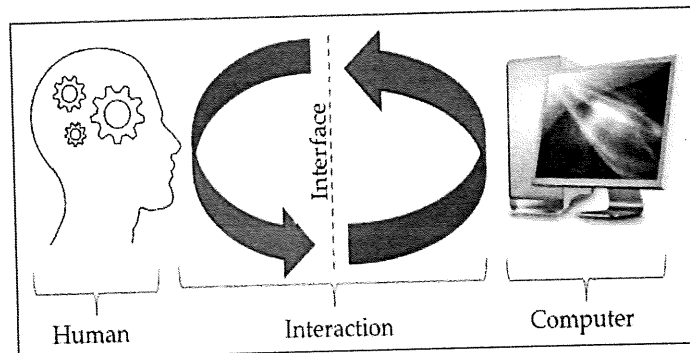


Figure 1: Human Computer Interaction (HCI)

HCI is a design field that focuses on the interfaces between people and computers. HCI incorporates multiple disciplines, such as computer science, psychology, human factors, and ergonomics, into one field.

- a) Based on Figure 1, define those three main components of HCI about Human, Interaction and Computer. (6 marks)
- b) There is a lot of design that can cause problems for users. Good design involves understanding how users interact with computers and enabling them to do so effectively. Identify **THREE (3)** objectives HCI that can assist in building product/systems. (6 marks)

QUESTION 2

- a) Define Ergonomics. Give **ONE (1)** example of product based on surrounding environments aspect. (3 marks)
- b) Windows is one of the elements of the WIMP interface. Describe the usage of horizontal ruler. (3 marks)

HUMAN COMPUTER INTERACTION (BCS 3253)

- c) In user interface design, there are many types of menus presented to the user. (6 marks)
Draw the example of menu below:

- i. Drop down menu
- ii. Pull down menu
- iii. Pie menu

- d) Give **TWO (2)** examples of buttons. (2 marks)

QUESTION 3

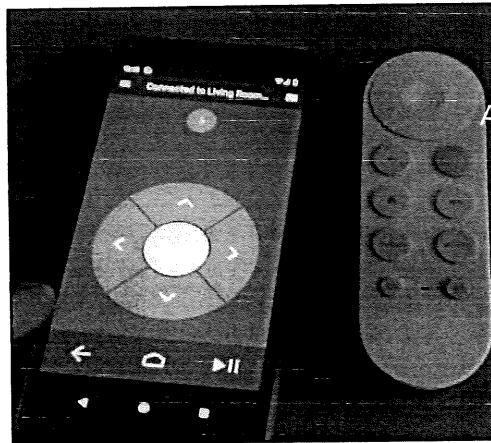


Figure 2: Android TV Remote Control

- a) Refer to Figure 2 show the Android TV remote control to operate device and help user navigate of TV channels and menu. Compare **FOUR (4)** characteristics of Physical Design and Virtual Design of the remote control. (8 marks)
- b) Differentiate between User Experience (UX) and User Interface (UI). (4 marks)
- c) Illustrate the Restaurant main page of website design using wireframes. (8 marks)
Includes all the possible menu design HCI design pattern for any restaurant

QUESTIONS 4



Figure 3: Standards logo

- a) There are three types of design rules which are principles, standards and guidelines. Refer Figure 3, give **THREE (3)** characteristics of standards used in Malaysia. (3 marks)
- b) The Design of Everyday Things by Don Norman 1988 principles show that good, usable design is possible. Illustrate and explain any product based on **TWO (2)** of the principles below: (8 marks)
- i. Visibility
 - ii. Consistency
- c) Define Affordances. (2 marks)
- d) Identify **THREE (3)** methods to analyze people's job. (3 marks)
- e) Draw a Hierarchical Task Analysis (HTA) diagram for task decomposition in order to "Cook a Meal". (8 marks)
- f) Describe the meaning of Task Decomposition. (3 marks)

HUMAN COMPUTER INTERACTION (BCS 3253)

QUESTIONS 5

Groupware is a suite of software tools specifically designed to be utilized by groups to enhance and promote teamwork.

- a) Describe **THREE (3)** categories of groupware. (6 marks)
- b) Illustrate **FOUR (4)** specific time and place in time/space matrix used as a tool for analyzing groupware. (4 marks)
- c) Explain **THREE (3)** types of Meeting and Decision Support System. (6 marks)
- d) Identify **FOUR (4)** shared applications and artefact in the groupware. (4 marks)
- e) Sketch the groupware design including at least **THREE (3)** features include in the homepage. (7 marks)

----- End of question -----

