



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2021/2022

THIRD/SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN INFORMATION SYSTEMS

MAIN CAMPUS

CIS 210: HUMAN COMPUTER INTERACTION

CIT 302: HUMAN COMPUTER INTERACTION

Date: 25th October, 2021

Time: 8.30 - 11.30am

INSTRUCTIONS:

- DO NOT write anywhere on this question paper
- Answer question ONE and any other TWO questions
- Start a new page



Question 1 (Compulsory 30 marks)

(6 marks)

(a) Define the following concepts

- (i) Interface usability
- (ii) Muller – Lyer illusion.
- (iii) Proactive inhibition

(3 marks)

(b) Demonstrate three ways in which psychology informs HCI decisions.

(c) State three characteristics of the long-term memory that could have implications on HCI. (3 marks)

(d) The sense of hearing is considered secondary to visual perception. Explain 4 ways in which haptic sensory can be applied in HCI. (4 marks)

(e) Consider the screen design below. Identify four design aspects that do not conform to form interface style design guidelines. (4 marks)

PRESCRIPTION REFILL SERVICE

Your name: _____ Date: ** _____

Prescription Refill Service

Doctors Name: Dr. _____

Medicine Name: **Prozac**

- Prozac
- Claritin
- Allegra D
- Singulair
- Propecia
- Viagra
- Paxil

** Use MM/DD/YYYY

Submit!

(f) State and explain four shortcomings of metaphorical design as an interface design strategy. (4 marks)

(g) Briefly explain why there is growing interest in HCI as a field of study and practice. (6 marks)

Question 2 (20 marks)

The figure below is a screenshot of the new look Ms Excel 2007 workbook. Using the screen shot and understanding of other Ms Office 2007 products, conduct a heuristic evaluation on the same. (20 marks)

Nelson and Motion

HCI SCREEN SHOT - Microsoft Excel

STUDENT NAME	ENGLISH	GRD	KISW	MATHS	HIST	TOTAL	RANK	REMARK
Ayuku Aseka	70		60	40	50	220	3	PASS
Irungu Wambua	50		70	60	60	240	1	PASS
Khalifa Mudigo	80		40	50	60	230	2	PASS
Nosieta Soita	30		75	60	50	215	5	PASS
Onyango Otieno	34		55	70	60	219	4	PASS
Paul Juma	56		34	20	30	140	6	FAIL

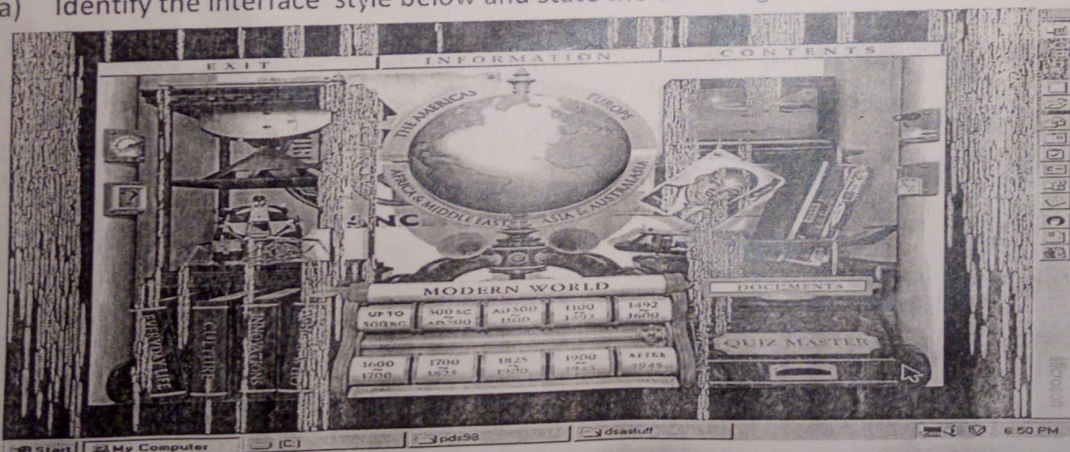
Mode #N/A

NO. OF Pass

Question 3 (20 marks)

(a) Identify the interface style below and state the advantages of such a style

(6 marks)



- (b) There is wide spread use of icons in user interfaces today. State and explain the reasons behind this phenomenon. (5 marks)
- (c) Discuss the workings of the short-term memory and explain its HCI design implications (4 marks)
- (d) Give three reasons why there was need for separation between the presentation and Application semantics in user interface management systems. (4 marks)