SLIATE

(handwritten notes at top:) Human User - the person interacting with the computer of device. computer - The hardware and software enabling interaction. Interaction - the way the user communication with the system

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

(handwritten:) Junail-0039

Higher National Diploma in Information Technology
First Year, Second Semester Examination – 2021
HNDIT2052-Principles of User Interface Design

Instructions for Candidates:		
Answer any five (05) questions.	No. of questions	: 06
Every question carries 20 marks	No. of pages	: 03
	Time	: Three (03) hours

Question 01.

(handwritten:) are computers that accept human input

(i). Define "Interactive system"? Give two examples for Interactive systems. [04 Marks]

(handwritten:) IPhone, facebook, Socom ...

(ii). What is an "Interface" in the context of UI design? [04 Marks]

(handwritten:) Interaction happens through the interface. An interface in a connection point enabling interaction and communication between system or components

(iii). Mention the components of HCI and describe each in briefly? [04 marks]

(iv). HCI is a multi-disciplinary subject. Do you agree? Justify your answer. [04 Marks]

(handwritten:) Yes.

(v). Users of a system differ from one to another. List four criteria to classify/ understand the user while designing user interfaces? [04 Marks]

(handwritten:) sketch, figma, Adope XD,

[20 Marks]

Question 02.

(i). What is Ergonomic in UI designing? [04 Marks]

(ii). What is a Wireframe? [04 Marks]

(handwritten:) A wireframe is a visual representation. or blueprint a user interface. design that outline the structure layout

(iii). List four user interface (UI) design tools available that assist designers in creating visually appealing and interactive interfaces. [04 Marks]

(handwritten:) and basic functionally of a digital product or website

(iv). "Being human-centered is so important in UI Designing". What does it mean by "Human-Centered"? [04 Marks]

(v). "Designing products for everyone is challenging" Do you agree? Justify your answer. [04 Marks]

(handwritten:) → UI designing should be

[20 Marks]

Readebility
Scalability
Complamantary
triadic

Striva for consistancy
Enable fraguent usars
to usa short cuts.
Offer informative
feedback
Design Diabs to yield

Question 03.

(i). Differentiate between Serif font family and Sans-Serif font family. Give an example for each. *Closna* [04 Marks]

(ii). Mention 02 factors should be considered when selecting a typeface for a UI design? *Using serif fonts for print.* [04 Marks] *Limit the total number of fonts.*

(iii). Describe the followings;
  (a). Primary colors —
  (b). Secondary colors — [04 Marks]

(iv). Differentiate between RGB color model and CMYK color model. [04 marks]

(v). As a UI designer, list two factors you should consider when choosing a color palette for your design? [04 Marks]
[20 Marks]

UCD is a collection of processes which focus on putting users at the center of product design and development.

Question 04.

(i). List two color palettes and explain them in brief. [04 Marks]

(ii). Identify the color palette for the given context below.

  (a). A design of various hues, values, and intensities of a single color. [02 Marks]

  (b). A design of colors that are placed in front of each other on the color wheel (opposite colors). → *Manochromatic color scheme* [02 Marks]

(iii). What is the "PACT Framework"? *Paople* *texts.* *tacnologies* *Activity* *Contaxt.* [04 marks]

(iv). Describe two advantages of PACT Analysis in designing. [04 Marks]

(v). What is a "Mental Model" in UI design? *Undarstand* [04 Marks]
Dasign. [20 Marks]
Davalop
Evcluata.

Question 05.

(i). List four of Shneiderman's Eight Golden Rules of interface Design. [04 Marks]

(ii). Explain how interfaces can be designed to prevent errors done by users. Give an example. [04 Marks]

(iii). "Make things visible" principle from Norman's seven principles of design helps bridge the gulf of execution and the gulf of evaluation. Do you agree? Justify your answer. [04 Marks]

(iv). What are the four steps in User-Centered design Process? [04 Marks]

(v). What is a scenario in User Interactive Design? [04 Marks]
[20 Marks]

Usability is a quality attribute that usares how easy user interfaces are to use.

Question 06.

(i). What is "Usability" in an HCI design? [04 Marks]

(ii). A highly usable system offers benefits to both users and business. Briefly explain 02 benefits of Usability to business. [04 Marks]

(iii). Explain the importance of Task Analysis in UI designing. [04 Marks]

(iv). What is a Prototyping? [04 Marks]

(v). List two advantages and two disadvantages of prototyping. [04 Marks]

[20 Marks]

· Prototyping is a means of exploing ideas before the real implamentation to varify proposed students.

ex: Bridgebuilderse crack stress models

Got ~~favourt~~ feedback on our design faster.

Experiment with alternative designs.

fix problems before code is written.

(05)

⑤ A scenario in ui designing refars to