UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER I
SESSION 2022/2023

COURSE NAME : HUMAN-COMPUTER INTERACTION

COURSE CODE : BIT 21303

PROGRAMME CODE : BIT

EXAMINATION DATE : FEBRUARY 2023

DURATION : 3 HOURS

INSTRUCTION : 1. ANSWER **ALL** QUESTIONS.

2. THIS FINAL EXAMINATION IS CONDUCTED VIA **CLOSED BOOK**.

3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK.

THIS QUESTION PAPER CONSISTS OF **FIVE (5)** PAGES

Q1 (a) Is user experience design (UXD) better than user interface design (UID)? Give your opinion.

(6 marks)

(b) Questions **Q1(b)(i)** and **Q1(b)(ii)** are based on **Figure Q1(b).**

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Mr. J would like to cancel his purchase of Ripping Hammer via
the XYZ website as shown in Figure Q1(b). He understands there
is a limited amount of time available to cancel an order and
is often anxious when submitting cancellation requests.
However, he is satisfied with the XYZ website which mitigates
his anxiety by immediately updating the order status page
after completing his cancelation request.
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Based on the given scenario, **Figure Q1(b)** shows a screenshot of the order cancellation page he made on the XYZ website.
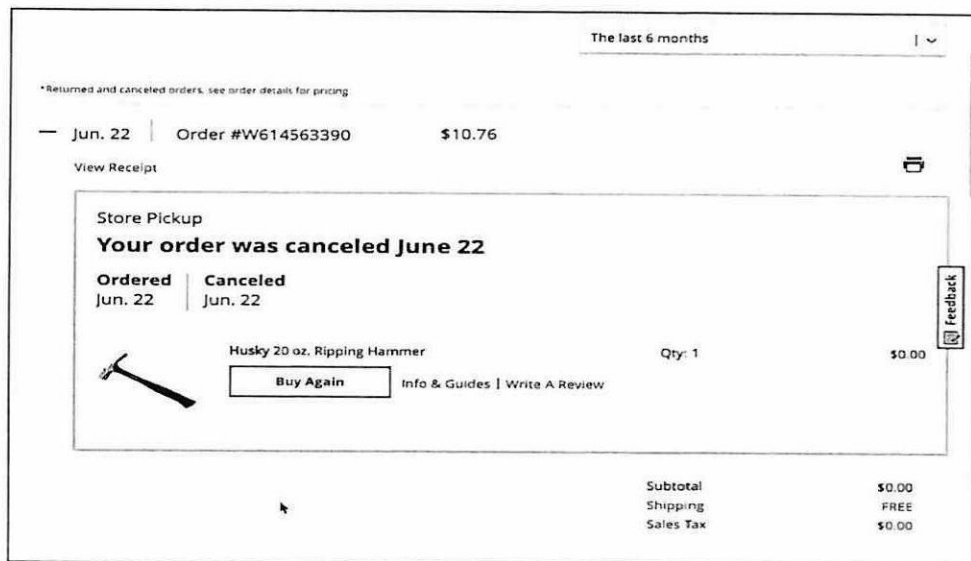

Figure Q1(b)

(i) Discuss the user-centered design (UCD) principle that led to his satisfaction with the appropriate example.

(9 marks)

(ii) Identify **FIVE (5)** characteristics of the order cancellation page that relieve Mr. J's anxiety.

(5 marks)

Q2 Answer **Q2(a)-Q2(e)** based on the system overview given in **Figure Q2**.

> The manager of Happy Ripe Farm would like to have an electronic system that covers all the aspects of his day-to-day administrative tasks. He needs the system to allow him to store and manage crop and farm related data in database. Apart from manager, the system will also be used by farm worker and office assistant.

Figure Q2

(a)   What might an evaluation goal be for the farm management system? Justify your answer.

(2 marks)

(b)   Suggests **FOUR (4)** questions in order to make the evaluation goal operational.

(4 marks)

(c)   Which evaluation methods would you choose to evaluate the farm management system? Justify your answer.

(4 marks)

(d)   How would you collect data during the evaluation of the system's usability?

(4 marks)

(e)   Identify and discuss **THREE (3)** practical issues you should consider when conducting the evaluation.

(6 marks)

Q3 (a) For each of the following situations, select the best evaluation technique and state your reason:

   (i) You are asked to collect data on how long a lecturer took to register their daily attendance using a biometric device. Specifically, you want to find out the impact of the position or orientation aspect of the sensor.

   (ii) A designer of an online LMS system needs to record the number of errors made by an instructor on the course content setup page by indirectly logging his/her keystrokes and mouse click.

   (iii) During recent Malaysia's General Election day, a new device that prints ballot paper based on fingerprint scanning of voters was installed in every voting station. A hidden camera was also installed to capture voters' activity when interacting with the printer.

   (iv) A mobile application expert is hired to evaluate the new mobile banking application. Among others, he focused on looking at how similar the system is to the real world.

   (v) A mobile application for bicycle sharing is developed. The designer tests the apps by mimicking how new users might use the apps. He performs a sequence of users' actions and gets it documented.

   (vi) You want to investigate the student satisfaction aspect in surfing their SMAP online website.

   (12 marks)

(b) Based on the system overview shown in **Figure Q3(b)**, identify and discuss the most suitable item of DECIDE framework that describes the scenario in **Q3(b)(i) – Q3(b)(iii)**.

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Excel-Smash  Court  Booking  (ESCB)  is  a  mobile
application.  The  primary  user  group  is  the  court
owner,  whereas  the  secondary  user  group  is  their
customer.  Among  others,  the  mobile  application
provides  court  booking,  court  management,  customer
registration,  payment,  and  reporting  functions.
```

Figure Q3(b)

   (i) Evaluation on ESCB aims at finding out whether customers can check court availability and make a booking based on their selected date.

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(ii) A field study would be most appropriate in assessing how the court customer reacts and respond to the mobile application in its natural environment.

(iii) A pilot study on the ESCB apps is deemed necessary so that any issues can be identified and rectified, prior to the real evaluation study.

(6 marks)

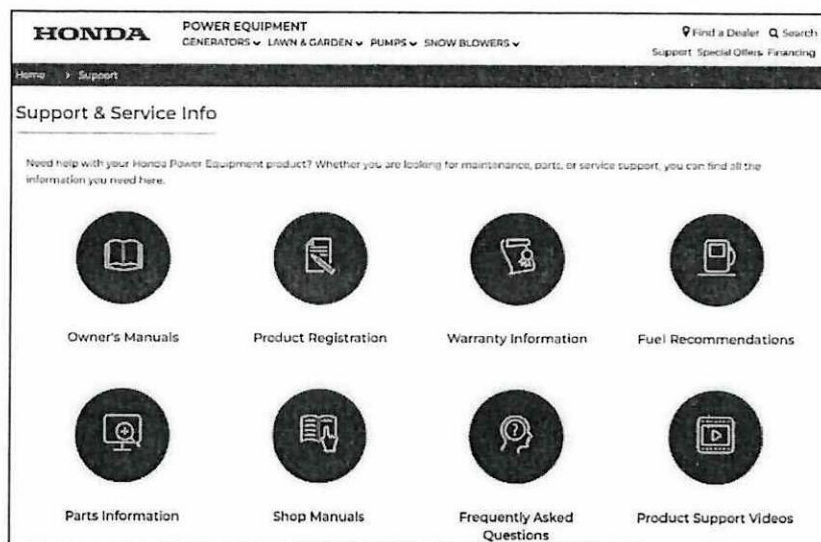**Q4** **Figure Q4** shows HONDA Power equipment Support and Service Info web page.

Figure Q4

(a) Discuss how **THREE (3)** approaches of user support in the HONDA Power Equipment Support and Service Info web page fulfill the basic requirement of user support.

(12 marks)

(b) Suggest **THREE (3)** other user supports that can be applied on the web to improve user engagement.

(12 marks)

- END OF QUESTIONS -

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