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**UTHM**  
Universiti Tun Hussein Onn Malaysia

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER I  
SESSION 2016/2017**

COURSE NAME : HUMAN COMPUTER INTERACTION  
COURSE CODE : BBU 20103  
PROGRAM CODE : BBF  
EXAM DATE : DECEMBER 2016 / JANUARY 2017  
DURATION : 3 HOURS  
INSTRUCTION : ANSWER ALL QUESTIONS

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

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- Q1** (a) Define and discuss each of the following human sensory system.  
(i) Visual sensory  
(ii) Touch sensory  
(iii) Auditory sensory
- (12 marks)
- (b) Elaborate four (4) types of the following paradigm shifts.  
(i) Batch processing  
(ii) Time sharing  
(iii) Graphical display  
(iv) Microprocessor
- (8 marks)
- Q2** (a) Discuss the differences between office and industrial system interfaces and its interaction.
- (8 marks)
- (b) Explain and illustrates by using a diagram for each of the design process in Human Computer Interaction (HCI).
- (12 marks)
- Q3** (a) Appropriate grouping and structure of interface helps user to perceive the information correctly. Discuss and illustrates using diagrams the following grouping techniques.  
(i) Alignment of numbers  
(ii) Multiple columns  
(iii) Decoration using fonts  
(iv) Order of items
- (16 marks)
- (b) Define the following Usability Principles  
(i) Robustness  
(ii) Learnability
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- (4 marks)
- Q4** (a) Describe the following terms and give examples to support your elaboration.  
(i) Multi-modal systems  
(ii) Multi-media systems
- (6 marks)
- (b) What is prototyping in HCI context?
- (2 marks)

(c) Give six (6) purposes of using a prototype in product design.

(12 marks)

**Q5** (a) Elaborate the following evaluation techniques in HCI.

- (i) Cognitive Walkthrough
- (ii) Protocol Analysis
- (iii) Physiological Methods

(6 marks)

(b) Discuss three (3) stages in designing Hierarchical Task Analysis (HTA).

(6 marks)

(c) In order to avoid users lost while browsing Universiti Tun Hussein Onn Malaysia (UTHM) portal, discuss the navigation techniques that may help users to ease their navigation in the portal (refer figure Q5(c)).

(8 marks)

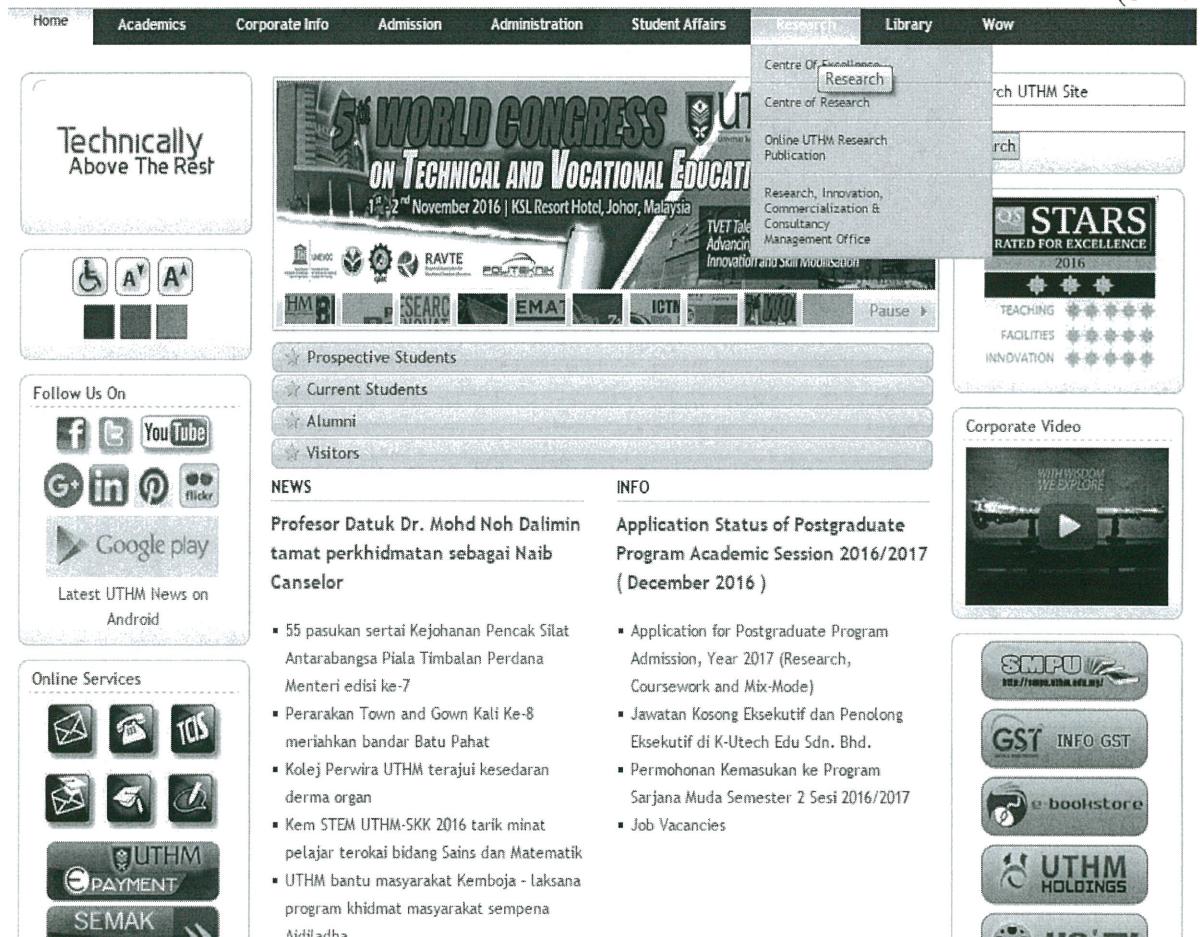


Figure Q5(c)

-END OF QUESTIONS-

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