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UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2018/2019

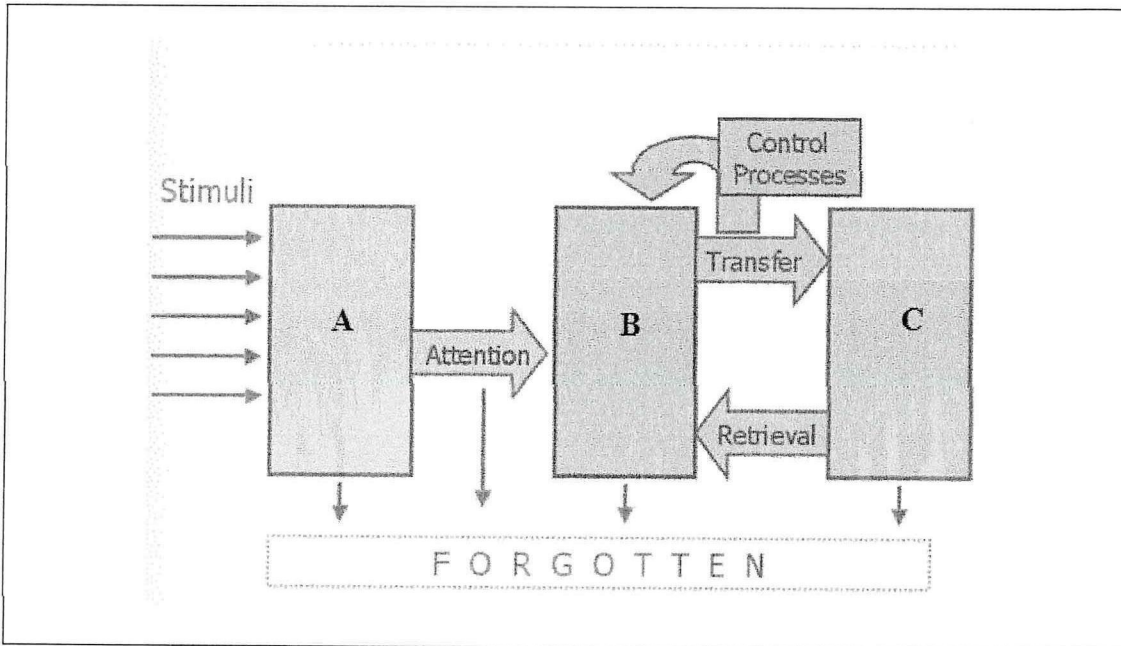|		
COURSE NAME	:	MULTIMEDIA SYSTEM AND APPLICATION
COURSE CODE	:	BIM 20404
PROGRAMME CODE	:	BIM
EXAMINATION DATE	:	JUNE/JULY 2019
DURATION	:	3 HOURS
INSTRUCTION	:	(A) ANSWER **ALL** QUESTIONS
		(B) PLEASE WRITE YOUR ANSWERS IN THIS QUESTION BOOKLET

THIS QUESTION PAPER CONSISTS OF **FIFTEEN (15)** PAGES

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Q1 (a) Define multimedia learning.

(4 marks)

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(b) Given the following **Figure Q1**:

Figure Q1

(i) Name the **THREE (3)** components of A, B and C for the memory and learning model in **Figure Q1**.

(3 marks)

Component	Name
A	
B	
C	

(ii) Identify which component in **Figure Q1** is also known as working memory.

(1 mark)

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(iii)   Identify the key problem that commonly happen in component B.

(2 marks)

(iv)   Analyze how the problem in **Q1(b)(iii)** can be occured in component B.

(6 marks)

(v)   Analyze **TWO (2)** factors which can influence the attention of moving the information from component A to component B.

(4 marks)

(i)
(ii)

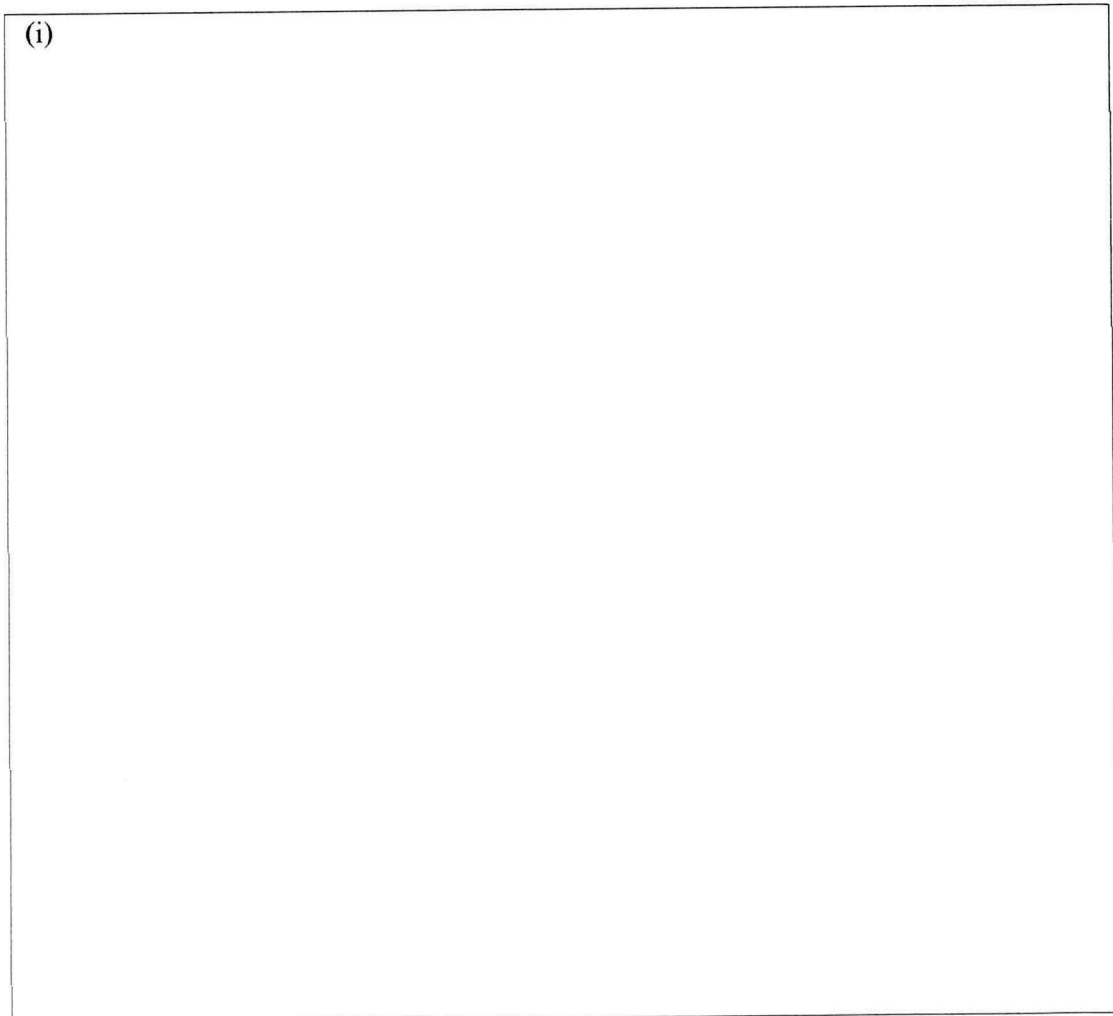**Q2**   Questions **Q2(a)-Q2(d)** are based on the given scenario.

Mobile Excellent Enterprise was assigned by Ministry of Health to develop an interactive mobile application about calorie control in order to encourage Malaysian to practise healthy lifestyle. The application enables the users to monitor their calorie level and calculate the calorie needed daily. The application also provides the user with 3 sets of exercises which well illustrated and described ensuring that they are performed correctly. Beside that, it includes a number of useful tips concerning a healthy lifestyle and meals suggestion with calorie counts.

(a)   Suggest an appropriate authoring tool that can be used in this project. Give **TWO** (2) reasons.
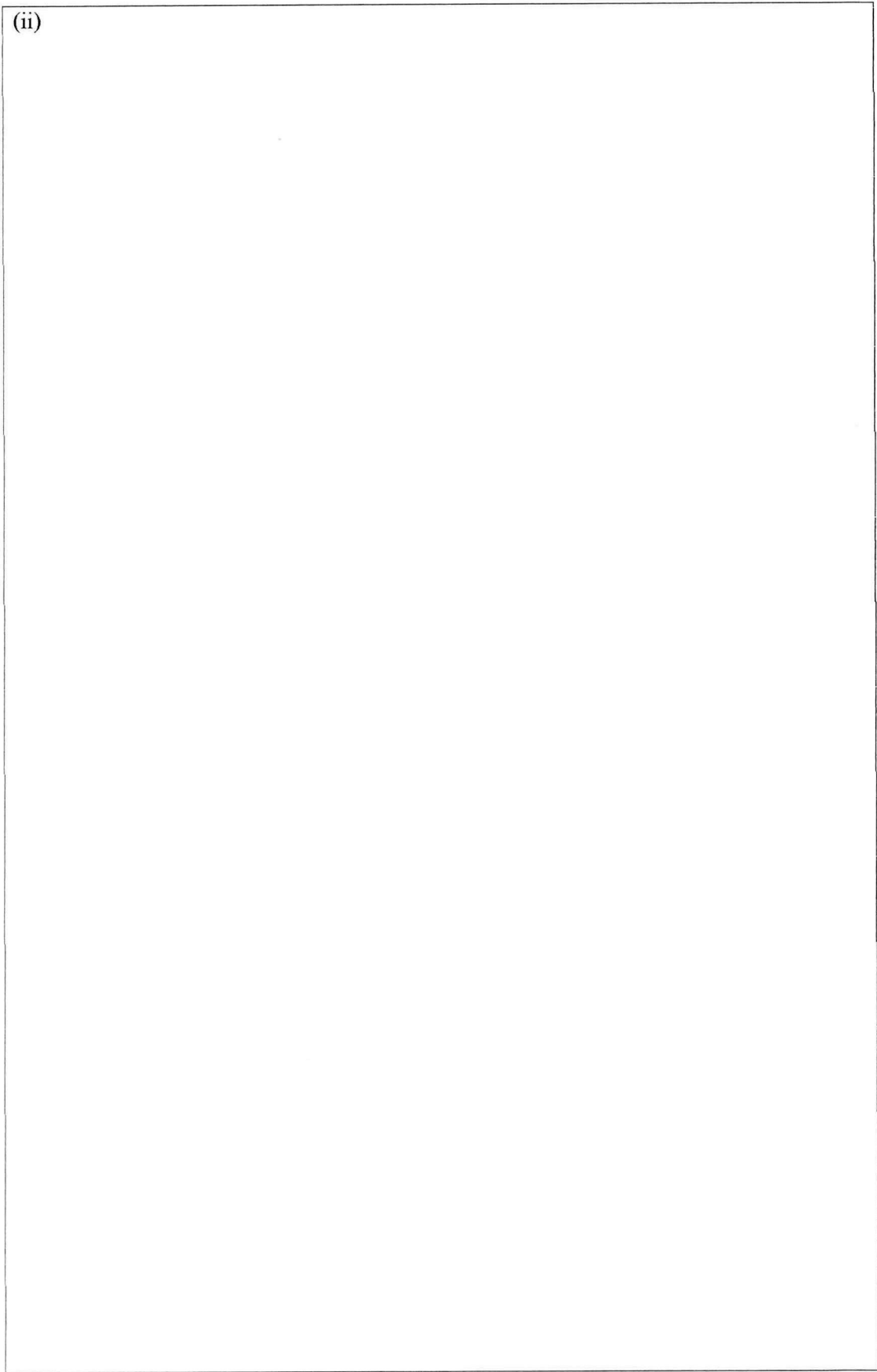
(6 marks)

Authoring Tool	
Reasons	(i)
	(ii)

(b)   Draw **FOUR (4)** interface designs (including main menu) based on the requirement stated in the case study above.
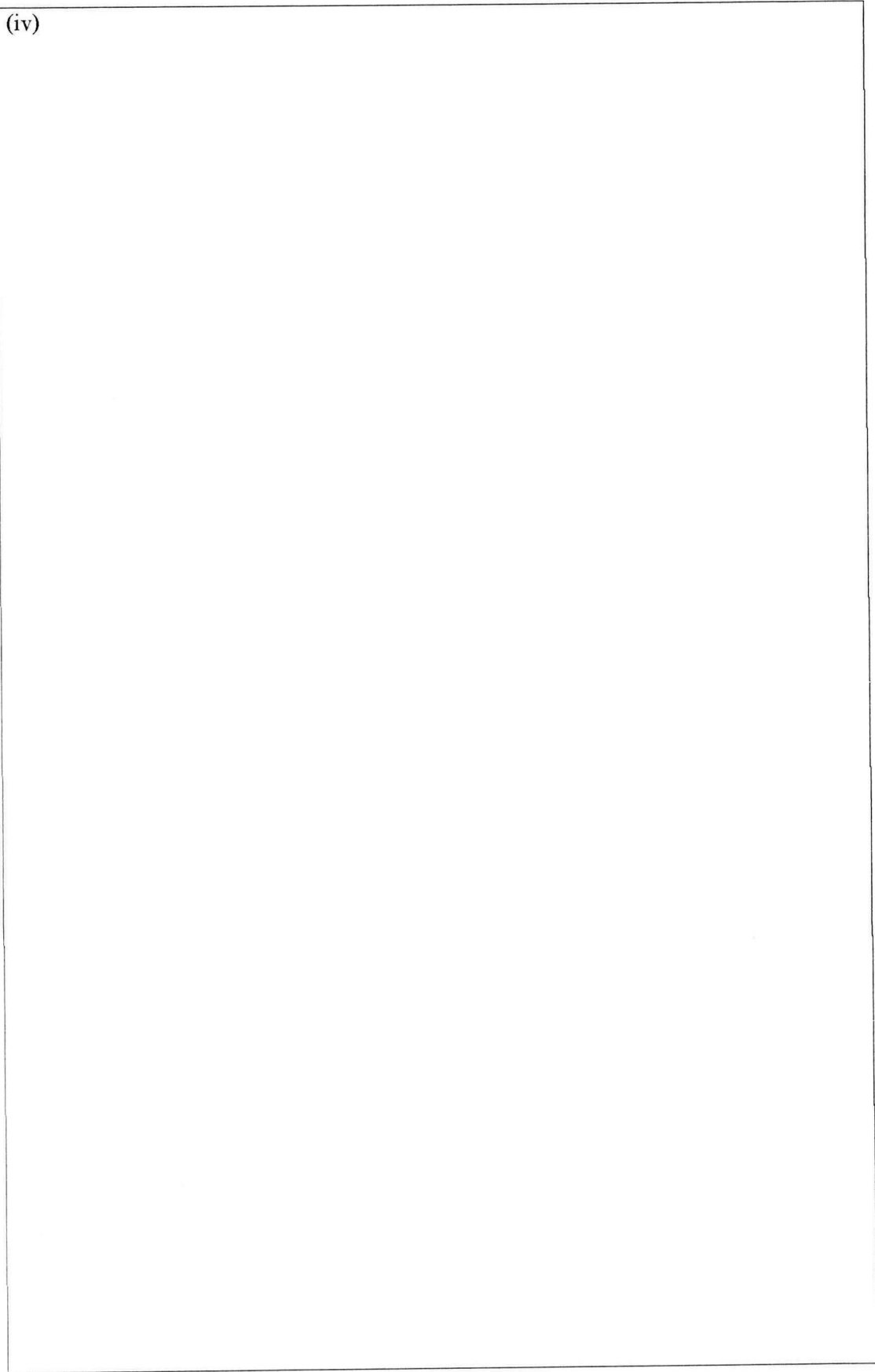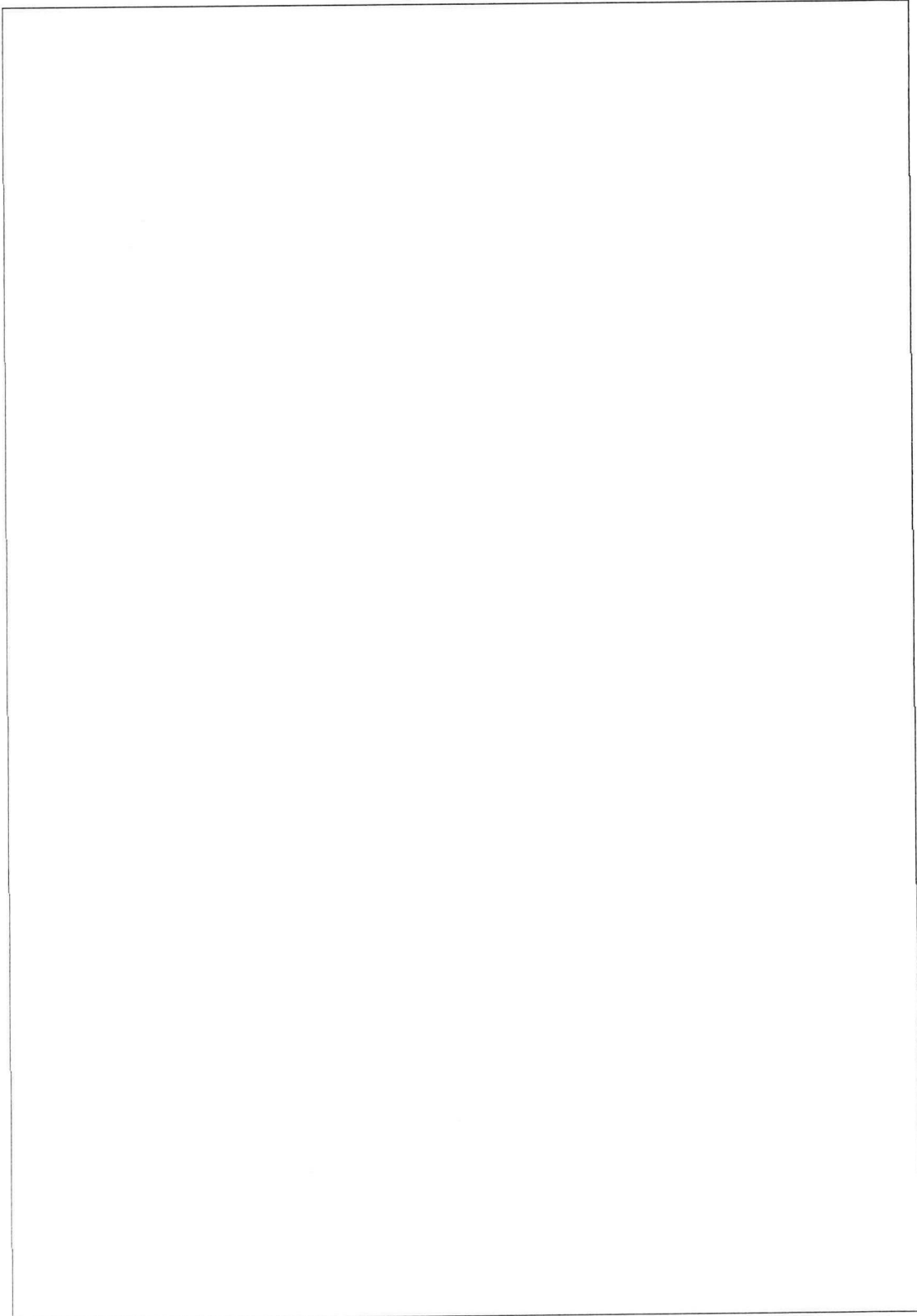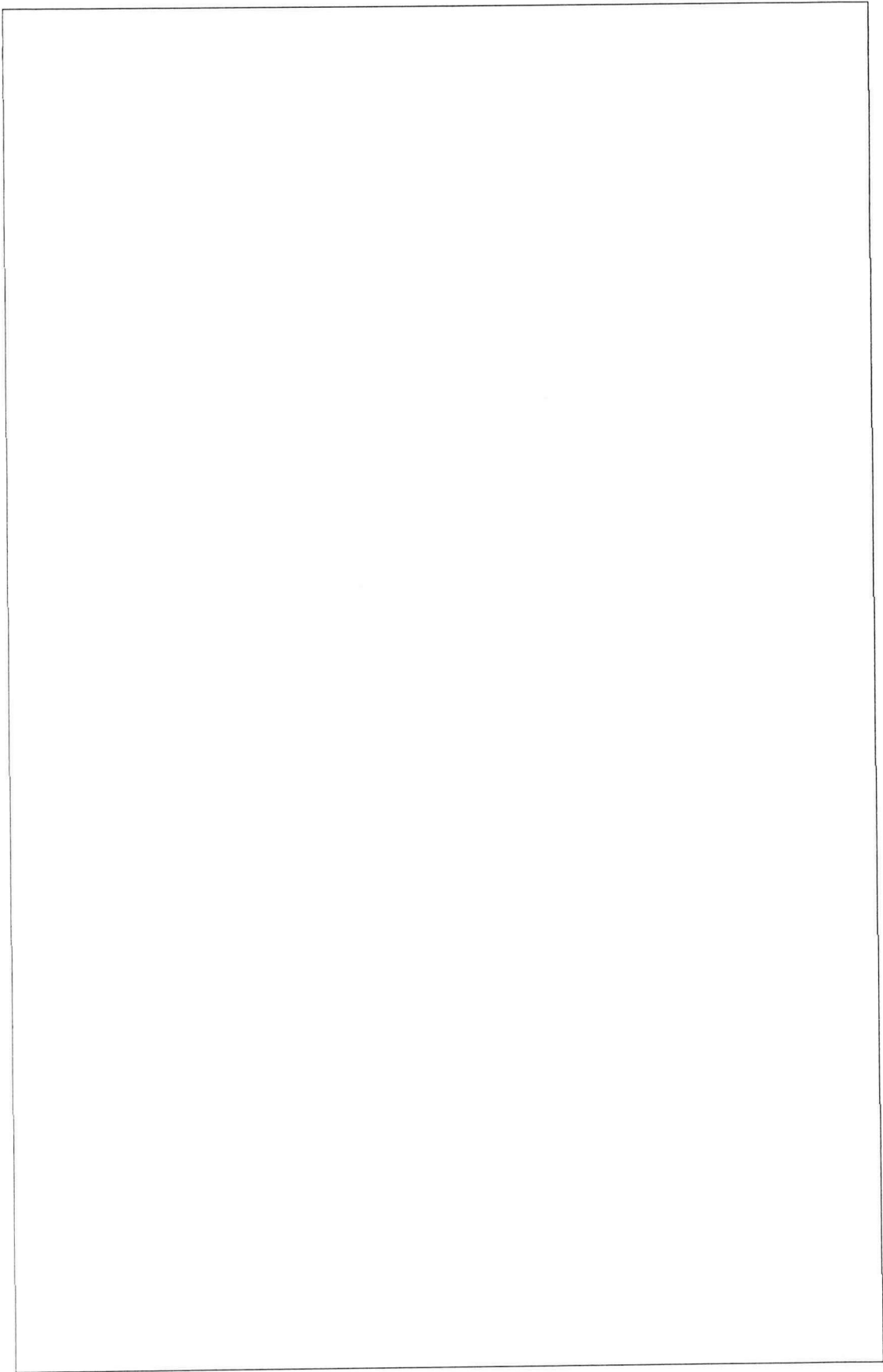
(12 marks)

(i)

(ii)

(iii)

(iv)

(c)   Draw the surface navigation structure for the proposed application based on the main menu designed in **Q2(b)**.

(8 marks)

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(d)   Justify **THREE (3)** reasons why people nowdays prefer to choose mobile aplication rather than other electronic application.

(6 marks)

(i)	
(ii)	
(iii)	

Q3   (a)   Describe **TWO (2)** types of web documents.

(6 marks)

Type	Description
(i)	
(ii)	

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(b)   Give **THREE (3)** differences between HTML and XML.
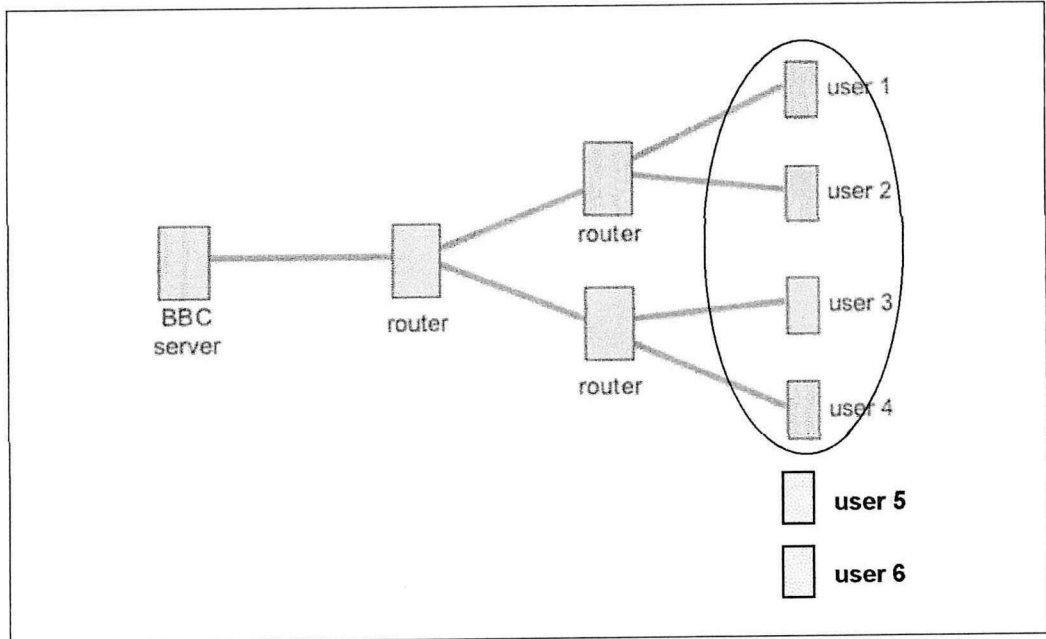
(6 marks)

HTML	XML
(i)	(i)
(ii)	(ii)
(iii)	(iii)

(c)   You are given a task by your lecturer to develop a website. If you are given a choice to use either HTML or XML as the programming language, which language that you most prefer? Give **TWO (2)** reasons.

(6 marks)

Programming Language	
Reasons	(i)
	(ii)

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Q4   (a)   Name the transmission method in **Figure Q4** to distribute multimedia information over the network.

(1 mark)

Figure Q4

(b)   Explain the transmission method answered in **Q4(a).**

(2 marks)

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(c)   Explain **ONE (1)** of any other transmission method. Support your explanation with an appropriate diagram.

(4 marks)

Transmission Method	
Diagram	

(d)   Real-time Protocol (RTP) is designed for the transport of real-time data in **Figure Q4.**
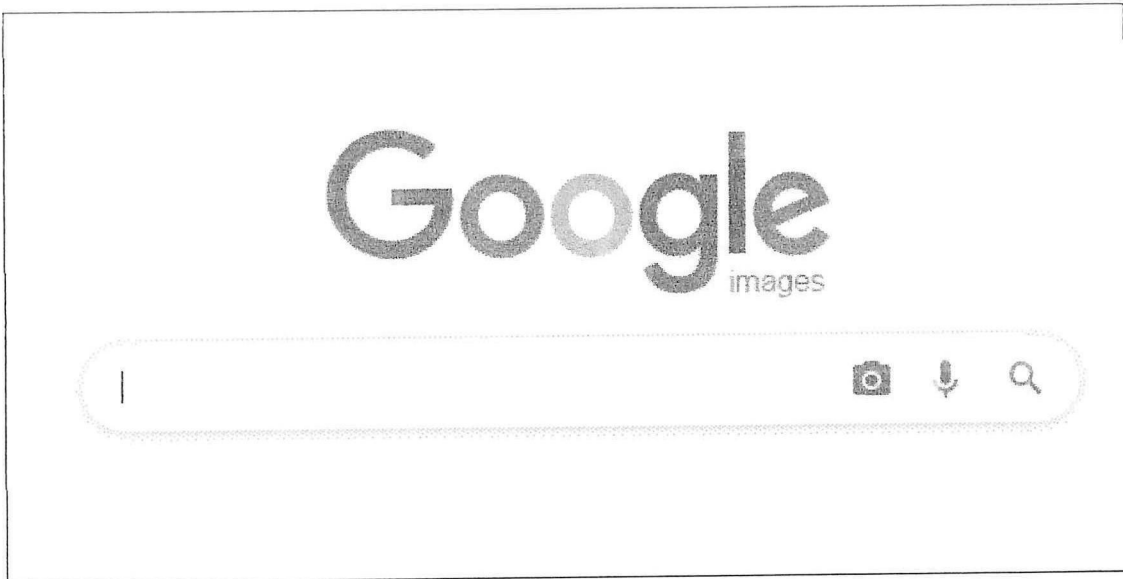
(i)   Name the companion protocol for RTP.

(1 mark)

(ii)   Describe **TWO (2)** types of companion protocol packets in **Q4(d)(i)**.

(4 marks)

Types	Description
(i)	
(ii)	

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Q5 Questions **Q5(a)-Q5(b)** are based on the **Figure Q5**.

Figure Q5

(a) Analyze the appropriate image retrieval method used in **Figure Q5**.

(4 marks)

(b) In your opinion, give **THREE (3)** reasons why Google provide an alternative search engine using image instead of keyword indexing.

(6 marks)

(i)

(ii)

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(iii)

Q6   (a)   Differentiate between Steganography and Cryptography.

(4 marks)

Steganography	Cryptography

(b)   Describe **TWO (2)** message carriers for steganography.

(4 marks)

Message Carrier	Description
(i)	
(ii)	

-END OF QUESTION -

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