



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2017/2018**

COURSE NAME : MULTIMEDIA SYSTEM AND APPLICATION
COURSE CODE : BIM 20404
PROGRAMME CODE : BIM
EXAMINATION DATE : JUNE 2018 / JULY 2018
DURATION : 3 HOURS
INSTRUCTION : (A) ANSWER ALL QUESTIONS
(B) PLEASE WRITE YOUR ANSWERS IN THIS QUESTION BOOKLET

THIS QUESTION PAPER CONSISTS OF **THIRTEEN (13)** PAGES

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Q1 (a) Define the following terminology:

(4 marks)

Terminology	Definition
(i) Internet Protocol (IP)	
(ii) IP address	

(b) Describe **TWO (2)** types of IP address. Give **ONE (1)** example of application that is best used in each IP address.


(8 marks)

	A	B
Type		
Description		
Example of Application		

(c) Explain **TWO (2)** functions of IP address.

(4 marks)

(i)
(ii)



(b) Discuss why real-time multimedia application requires both RTP and RTSP instead of the common Internet protocol HTTP.

(8 marks)

(c) Name the companion protocol of RTP.

(1 mark)

(d) Analyze how protocol answered in Q2(c) monitor QoS in streaming system.

(6 marks)

(i)	
(ii)	
(iii)	<div style="border: 2px solid red; padding: 5px; display: inline-block;">TERBUKA</div>

Q4 (a) Differentiate between multimedia data and multimedia object. Give **ONE (1)** example of each.

(6 marks)

	Multimedia Data	Multimedia Object
Difference :		
Example :		

(b) Describe **THREE (3)** categories of multimedia data structure.

(6 marks)

(i)
(ii)
(iii)

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- (c) Give **ONE (1)** example of multimedia data to represent image for **ANY** multimedia data structure categories answered in **Q4(b)**.

(1 mark)

- (d) Discuss **ONE (1)** possible image retrieval technique that can be applied in the multimedia application illustrated in **Figure Q4(d)**.

(5 marks)

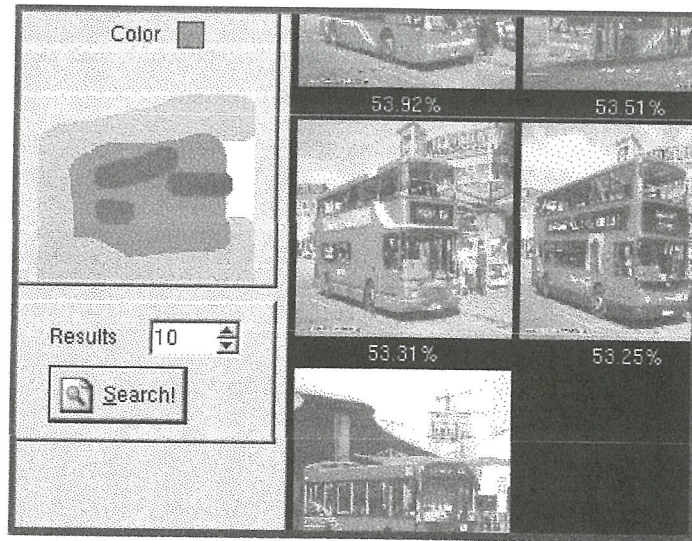


Figure Q4(d)

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Q5 Question **Q5(a)-Q5(d)** are based on the given scenario:

Media Power Enterprise was assigned by Ministry of Agriculture and Agro-based Industry to develop an interactive mobile application about Malaysian Herbs in order to introduce Malaysia as a biodiversity hub of herbal species. The application is expected to enable the user to explore the content by clicking their way through interactive buttons and infographic approach. The apps also have fun activity to engage user with the apps.

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

(5 marks)

Authoring Tool :	
Reason :	(i)
	(ii)

(b) Draw **THREE (3)** interface designs for the following modules:

- (i) main menu
- (ii) content
- (iii) fun activity

(12 marks)



(i) main menu

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(ii) content

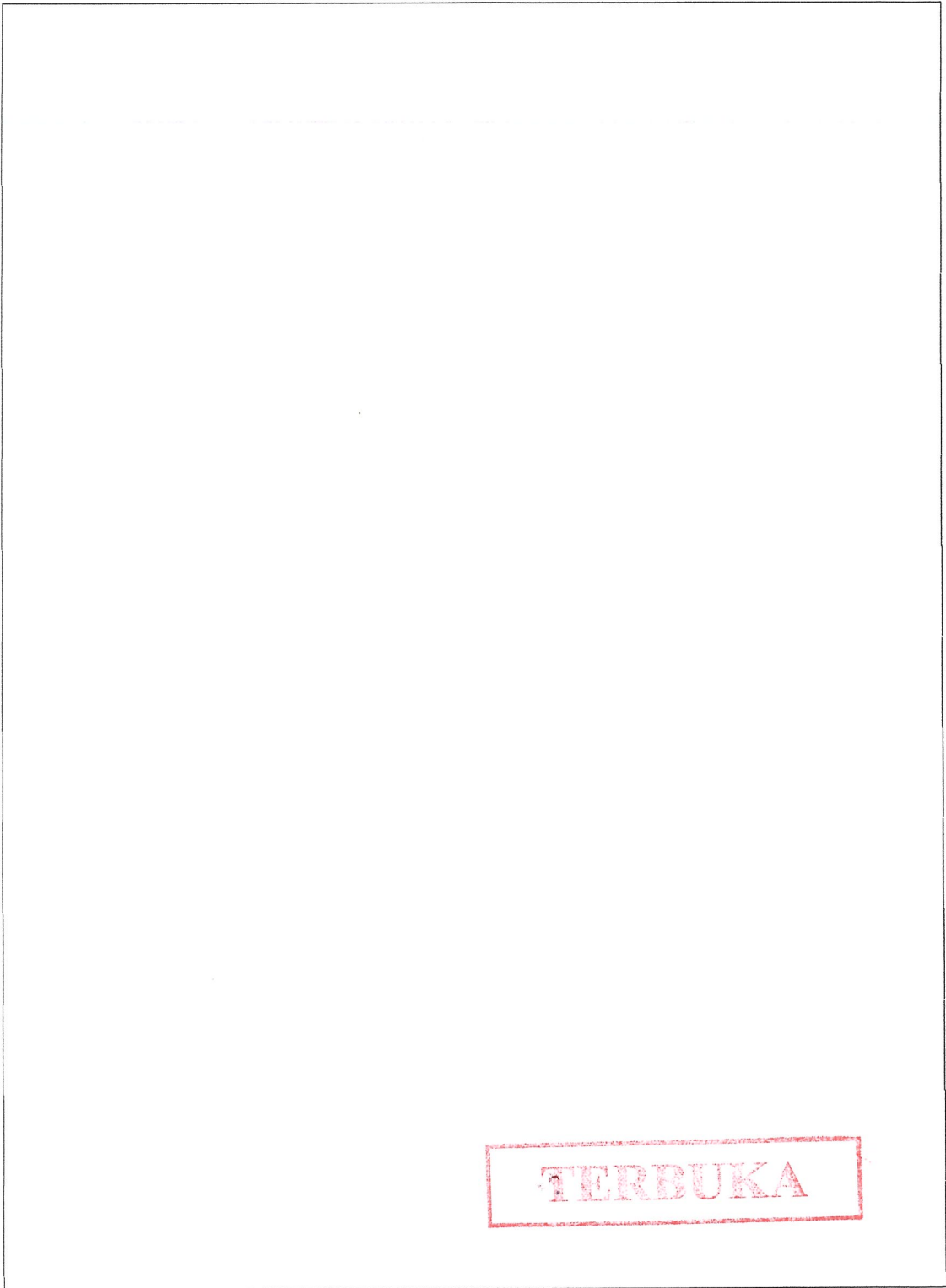
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(iii) fun activity

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- (c) Draw **ONE (1)** surface navigation structure for the proposed application based on the main menu designed in **Q5(b)**.

(8 marks)



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(d) Justify **TWO (2)** reasons why people nowadays prefer to choose mobile application rather than other electronic application.

(4 marks)

(i)
(ii)

-END OF QUESTION -

