



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

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

COURSE NAME : FUNDAMENTALS TO WEB TECHNOLOGY  
COURSE CODE : BIW 10103  
PROGRAMME CODE : BIW  
EXAMINATION DATE : JUNE 2018 / JULY 2018  
DURATION : 3 HOURS  
INSTRUCTION : ANSWER ALL QUESTIONS

**TERBUKA**

THIS QUESTION PAPER CONSISTS OF **SIX (6)** PAGES

**SECTION A**

**Instruction : Choose the CORRECT answer.**

- Q1** What layer in the Transport Control Protocol / Internet Protocol (TCP/IP) stack is equivalent to the transport layer of the Open System Interconnection (OSI) model?
- (A) Application
  - (B) Host-to-Host
  - (C) Internet
  - (D) Network Access

(1 mark)

- Q2** Which Hypertext Markup Language (HTML) tag is used to describe a website?
- (A) <!doctype>
  - (B) <meta>
  - (C) <body>
  - (D) <head>

(1 mark)

- Q3** Which class of Internet Protocol (IP) address provides a maximum of only 254 host addresses per network ID?
- (A) Class A
  - (B) Class B
  - (C) Class C
  - (D) Class D

(1 mark)

- Q4** What is the network ID for a computer whose IP address is 190.148.64.23?
- (A) 190
  - (B) 190.148
  - (C) 190.148.64
  - (D) None of the above



(1 mark)

- Q5** Which of the following is the most important area to be concerned in cloud computing?
- (A) Security
  - (B) Storage
  - (C) Scalability
  - (D) All of the above

(1 mark)

**Q6** Layer which is not presented in TCP/IP model is :

- (A) Application Layer
- (B) Internet Layer
- (C) Transport Layer
- (D) Presentation Layer

(1 mark)

**Q7** Which of the following is **TRUE** regarding Client/Server system?

- (A) It is platform dependent.
- (B) Heavier processing is done by the client computer.
- (C) All the processing is done by client.
- (D) The client and the server should have some processing capabilities.

(1 mark)

**Q8** When Zahra Nur is trying to access a Universal Resource Locator (URL), the following message is displayed on the browser :

```
HTTP/1.1 304 Not Modified
```

What could be the reason for the message?

- (A) Redirecting the Web browser to another URL.
- (B) The requested HTML file or CGI script has sufficient permission.
- (C) Current links or records using the URL that the response is received should be updated.
- (D) None of the above.

(1 mark)

**Q9** Apart from <b> tag, what other tag that makes text bold?

- (A) <fat>
- (B) <strong>
- (C) <black>
- (D) <emp>

(1 mark)

**Q10** Which port is reserved for HTTP protocol?

- (A) 21
- (B) 80
- (C) 23
- (D) 53

(1 mark)



SECTION B

Instruction : Answer ALL questions.

Q11 (a) Discuss TWO (2) purposes of ping.

(4 marks)

(b) Explain the outcome in Figure Q11 after running the following TCP/IP utility tool.

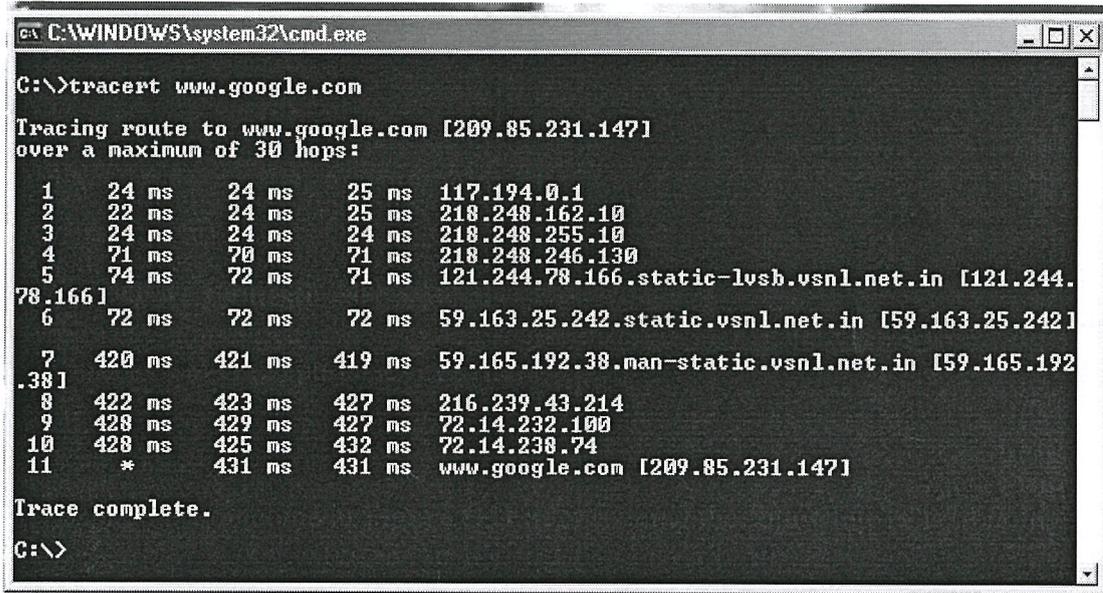


Figure Q11

(4 marks)

Q12 (a) Consider the following HTML code:

```
<a href="http://www.uthm.edu.my/fsktm">
```

(i) Provide the HTTP/1.1 request structure submitted by a browser.

(5 marks)

(ii) Provide the HTTP/1.1 response structure submitted by a server.

(5 marks)

(b) Consider the following form:

**LOGIN**

Username: \_\_\_\_\_  
Password: \_\_\_\_\_



Figure Q12(b)

(i) Explain on how to secure the transaction after the `SEND` button is clicked in **Figure Q12(b)**.

(5 marks)

(ii) Using `username=BIW10103` and `password=WEBTECH`, provide the HTTP/1.1 response structure submitted by a server.

(5 marks)

**Q13** (a) Give **TWO (2)** differences between Domain Name System (DNS) and IP address.

(2 marks)

(b) Explain **SIX (6)** steps on how DNS server works.

(6 marks)

(c) List **FOUR (4)** newest Top Level Domain in DNS.

(4 marks)

**Q14** (a) Explain **TWO (2)** characteristics of cloud computing.

(4 marks)

(b) Give **TWO (2)** advantages and **TWO (2)** disadvantages of cloud computing.

(4 marks)

**Q15** (a) Give **FOUR (4)** types of web attacks.

(4 marks)

(b) Suggest **TWO (2)** steps to secure each of the following:

(i) web server.

(3 marks)

(ii) web application.

(3 marks)



(c) Determine whether each of the following statement is **True** or **False**.

(i) Digital signatures are electronic files that are used to uniquely identify users and resources over networks.

(ii) Secure Socket Layer (SSL) uses *Symmetric* encryption only.

(2 marks)

Q16 Based on **Figure Q16**, write full HTML codes to generate a web page.



Figure Q16

(20 marks)

-END OF QUESTION -

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