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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

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

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COURSE NAME : FUNDAMENTALS OF WEB TECHNOLOGY
COURSE CODE : BIW 10103
PROGRAMME CODE : 1 BIW
EXAMINATION DATE : JUNE 2017
DURATION : 2 HOURS AND 30 MINUTES
INSTRUCTION : ANSWER **ALL** QUESTIONS

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

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SECTION A

Choose the best answer for each of the following questions.

- Q1** When Adam Adni is trying to access a uniform Resource Locator (URL), the following message is displayed on the browser:

HTTP/1.1 302 Found

What does the message represent?

- (A) Redirecting the Web browser to another URL
 - (B) The requested HTML file has sufficient permission
 - (C) Current links or records using the URL that the response is received for should be updated
 - (D) Found the link
- Q2** Internet Protocol (IP) address 128.5.5.5 belongs to _____ .
- (A) class A
 - (B) class B
 - (C) class C
 - (D) class D

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- Q3** The total number of IP address classes are _____ .

- (A) 3
- (B) 4
- (C) 5
- (D) 9

- Q4** 127.0.0.1 is a _____ .

- (A) limited broadcast address
- (B) direct broadcast address
- (C) multicast address
- (D) loop-back address

- Q5** The main function of an SMTP server is to _____ .

- (A) compile email
- (B) interpret email
- (C) deliver emails from one network to another network
- (D) deliver emails from one server to another server

- Q6 Which of the following is not an advantage of cloud computing?
- (A) No worries about running out of storage
 - (B) Easier to maintain a cloud network
 - (C) Immediate access to computing resources
 - (D) Paying only for what you use
- Q7 “Yahoo”, “Infoseek” and “Lycos” are _____.
- (A) Search Engines
 - (B) Browsers
 - (C) News groups
 - (D) None of the above
- Q8 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
- Q9 A user found that his laptop is not functioning well and might have a virus. Which of the following should be performed?
- (A) Connect the laptop to the network and scan the laptop.
 - (B) Use bootable media to run an antivirus scan on the laptop.
 - (C) Reinstall the operating system.
 - (D) Back up the user's hard drive to a new laptop.
- Q10 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 user personal computer
 - (D) The client and the server should have some processing capabilities



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(10 marks)

SECTION B

Q11 (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.
- (ii) Provide the HTTP/1.1 response structure submitted by a server.

(10 marks)

(b) Consider the following form:

The form is titled "LOGIN" and contains two input fields: "Username:" and "Password:". Below the fields is a button labeled "SEND".



Figure Q11(b)

- (i) Explain on how to secure the transaction after the SEND button is clicked in **Figure Q11(b)**.

(5 marks)

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

(5 marks)

Q12 (a) Explain data encapsulation.

(2 marks)

(b) A clerk type `http://www.google.com` into the web browser and hit enter.

Explain on how the domain name server works for the above transaction.

(6 marks)

(c) List **TWO (2)** newest generic Top Level Domains in Domain Name System (DNS).

(2 marks)

Q13 (a) Explain **THREE (3)** layers of cloud service model.

(9 marks)

(b) Give **ONE (1)** technology for **EACH** layer explained in **Q13(a)**.


(3 marks)

- Q14** (a) Explain **ONE (1)** category of authentication method. (2 marks)
- (b) Suggest **TWO (2)** steps to secure each of the following:
- (i) web server.
 - (ii) web application. (4 marks)
- (c) Determine whether each of the following statement is **True** or **False**.
- (i) URLs that require SSL connection start with *https*: (port 433) instead of *http*: (port 80).
 - (ii) Secure Socket Layer (SSL) uses *Symmetric* encryption only. (2 marks)

Q15 Based on **Figure Q15**, write full HTML codes to generate a webpage as in the given format.

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A. Our Mission
 Habitat for Humanity believes that every man, woman and child should have a decent, safe and affordable place to live.

B. Why We Build
 There are nearly 2 billion people around the world who live in slum housing and more than 100 million are homeless.

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Figure Q15

Format:

- Background colour of the page should be yellow.
- Text style should be Times New Roman and colour should be green.
- Picture used in the page is the file “house.jpg”.
- Table should have a border of colour blue.
- Use the concept of lists for creating the list given in the web page.
- Pages are linked to :
 - LearnAboutHabitat.html
 - WhereWeBuild.html
 - SupportHabitat.html
 - Stories.html

(20 marks)

-END OF QUESTION -

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