



# SLIATE

**SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION**

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

## **Higher National Diploma in Information Technology**

**First Year, First Semester Examination – 2018**

### **HNDIT1106 – Web Development**

Instructions for Candidates:

Answer four (04) questions **including question 01**

All questions carry equal marks.

No. of questions : 05

No. of pages : 05

Time : Two (02) hours

#### **Question 01**

(i) Fill in the blanks with the most suitable answer from the list given below.

- (a) \_\_\_\_\_ is the first network which used the packet-switching concept for the first time.
- (b) \_\_\_\_\_ addresses are unique numeric identifiers that are needed by every device that connects to the internet.
- (c) Dynamic websites are \_\_\_\_\_ expensive to be maintained over static websites when the sites need frequent changes.
- (d) A \_\_\_\_\_ web site comprises the perpetual collective work of many authors.
- (e) Social networking sites belong to the \_\_\_\_\_
- (f) \_\_\_\_\_ is the most suitable Internet connectivity option for an organization like large-scale bank.
- (g) Bandwidth is measured in \_\_\_\_\_.
- (h) \_\_\_\_\_ will appear to be useful software but will actually damage when installed or run on your computer.
- (i) Evil websites pretend to be trusted websites, are used in \_\_\_\_\_
- (j) In a "Form" of a web page, \_\_\_\_\_ are used when more than one option is required to be selected.

(pps, bps, web 1.0, web 2.0, Phishing, static, collaborative, less, more, spyware, trojans, , IP, TCP, Internet, ARPANET, NSF, checkboxes, radio buttons, ADSL, leased line, Wi-Fi)

(2x10=20 marks)

- (ii) Select the most suitable answer.
- (a) Which of the following is a correct IP address?  
 i) 92.168.15                      ii) 172.16.254.1  
 iii) 258.12.1.0                      iv) 92.168.15.400
- (b) Which of the following is NOT an example for a top-level domain?  
 i) .lk              ii) .com              iii) .mil              iv) .bus
- (c) ..... is NOT a wireless connectivity option.  
 i) Wi-Fi              ii) Fiber Optic              iii) Wi-Max              iv) Satellite
- (d) Which of the following is most difficult to implement in an E-commerce web site?  
 i) Interactivity                      ii) Richness  
 iii) 100% security                      iv) Information density
- (e) ..... is not an example for a malicious software.  
 i) Worms              ii) Virus              iii) Trojans              iv) Anti-Virus

(01 x5 = 05)

## Question 02

- (i) Write down two (02) functions of each of the following protocols.  
 (a) TCP (02 marks)  
 (b) IP (02 marks)
- (ii) List three (03) characteristics of IP addresses. (03 marks)
- (iii) Expand the abbreviations given below. (04 marks)  
 (a) WWW    (b) HTTP    (c) DNS    (d) URL
- (iv) Write down three (03) popular services of Internet. (03 marks)
- (v) List two (02) advantages and two (02) disadvantages of social networks. (04 marks)
- (vi)  
 (a) Mention three (03) additional features included in Dynamic websites compared to Static websites. (03 marks)  
 (b) Give two (02) examples for client-side processing technologies used in dynamic web pages. (04 marks)

**(Total 25 marks)**

**Question 03**


- (i)
- (a) Briefly explain the term “E-Commerce”. (02 marks)
  - (b) Write down two (02) benefits an organization can acquire from E-commerce. (04 marks)
  - (c) Mention two (02) technological limitations of E-commerce. (04 marks)
- (ii) Define the following terms relevant to Internet security. (08 marks)
- (a) Malicious software
  - (b) Hacker
  - (c) Virus
  - (d) spyware
- (iii) Write down three (03) symptoms of spyware. (03 marks)
- (iv) How does a software firewall work? (Explain briefly) (04 marks)

**(Total 25 marks)****Question 04**

- (i) Briefly explain the duty of a web browser. (02 marks)
- (ii) Mention the purpose of the following HTML tags. (08 marks)
- (a) <CENTER>
  - (b) <OL>
  - (c) <UL>
  - (d) <HR>
- (iii) Write the html codes to generate the web page given while maintaining the correct html page structure. (15 marks)
- (Name of the image is “sliateLogo.png”. “Click here” text is linked to SLIATE web : <http://www.sliate.ac.lk>)

**Instructions for page formatting.**

Content	Instructions
Welcome you to SLIATE !	Header level 1
Sri Lanka Institute of Advanced Technological Education	Header level 3
Table border	2 pixels
Table 01:ATI Centers and Sections	Table caption
Page background color	Yellow
When the image is not existing	Show the name of image



# Welcome you to SLIATE !

## Sri Lanka Institute of Advanced Technological Education

Type	ATI Name	Contact Number
ATI Centers	Galle	041 111 1111
		041 888 8888
	Dehiwala	091 222 2222
	Gampaha	033 333 3333
ATI Sections	Tangalle	047 444 4444
	Vauniya	024 555 5555

Table 01:ATI Centers and Sections  
[Click here](#) for more details

(Total 25 marks)

### Question 05

- (i) Briefly explain the purpose of using frames in a web page. (02 marks)
- (ii) Sketch the browser view of the following html page. (06 marks)

```
<HTML>
<HEAD>
<FRAMESET COLS= "* ,2* ,*" >
<FRAME SRC=""> <FRAME SRC = ""> <FRAME SRC = "">
</FRAMESET>
</HEAD>
</HTML>
```

- (iii) What is the purpose of including a **Form** in a web page? (03 marks)
- (iv) Sketch the output of the web page generated by the following HTML codes. (14 marks)

```

<HTML>
<HEAD></HEAD>
<BODY>
<FORM>
<H1>Exam Application Form - 2018</H1>
First Name: <INPUT TYPE="TEXT" SIZE=25 NAME="firstName"> <BR><BR>
Family Name: <INPUT TYPE="TEXT" SIZE=25 NAME="LastName"><BR><BR>
Address: <br><TEXTAREA ROWS="5" COLS="20" NAME="address">
</TEXTAREA><BR><BR>
Gender: <INPUT TYPE="RADIO" NAME="Gender" CHECKED>Male
<INPUT TYPE="RADIO" NAME="gender">Female <BR><BR>
Select subjects:
<INPUT TYPE="checkbox" NAME="subjects" CHECKED > WEB
<INPUT TYPE="checkbox" NAME="subjects" > PC
<INPUT TYPE="checkbox" NAME="subjects" > DBMS
<BR><BR>
<INPUT TYPE="SUBMIT" NAME="SUBMIT" VALUE="Submit">
<INPUT TYPE="RESET" VALUE="Reset">
</FORM>
</BODY>
</HTML>

```

**(Total 25 marks)**