



**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, 1<sup>ST</sup> Semester Examination - 2013**

**IT 1007 – Internet Application & Web Development (New)**

**Instructions for Candidates:**

Answer any five (05) questions including question No. 1

**Time : Three (03) hours**

**No of pages : 05**

**No of questions : 08**

(1) ✓

Fill the blanks given, using the suitable answer in the cage.

- (i). The Internet was originally a project for \_\_\_\_\_.
- (ii). World Wide Web was proposed by \_\_\_\_\_.
- (iii). A network's \_\_\_\_\_ is the central structure that connects other portions of the network.
- (iv). A URL can specify the IP address of the Web \_\_\_\_\_ that houses a Web page.
- (v). \_\_\_\_\_ is the protocol that supports linking from one web page to another page.
- (vi). DNS translates a domain name into \_\_\_\_\_.
- (vii). Software, such as Explorer and Firefox, are referred to as \_\_\_\_\_.
- (viii). When sending an e-mail, the \_\_\_\_\_ line describes the contents of the message.
- (ix). Unsolicited e-mail advertising is known as \_\_\_\_\_.
- (x). Social networks are considered \_\_\_\_\_.

CERN, backbone, client, ARPA, Tim Berners-Lee, URL, server, IP, contents, web 1.0 sites, web browsers, web 2.0 sites, spam, subject, HTTP

(Total marks 20)

(2)

- (i). (a) ADSL is one type of connectivity to get hook on to internet. State three other internet connection types and give three characteristics of those three types of connections.

(6 marks)

- (b) Compare and contrast wired internet connection and wireless internet connection. Give two examples for each.

(4 marks)

- (ii). Explain the role of a router in the management of Internet traffic.

(5 marks)

- (iii). Internet Service Providers often use the term "up to", e.g. speeds of up to 8Mbps, when they advertise their services. What are the factors which make this necessary?

(5 marks)

(Total marks 20)

(3)

- (i). (a) What is web server?

(3 marks)

- (b) Give three examples for web servers.

(3 marks)

- (ii). Explain the function of a web browser.

(5 marks)

- (iii). What are the differences between HTML and HTTP?

(6 marks)

- (iv). Explain why two different search engines may return different results when given the same search terms.

(3 marks)

(Total marks 20)

(4)

- (i). What is client-server architecture? Illustrate your answer by giving three different examples of its use on the Internet.

(5 marks)

- (ii). Outline the role of protocols as applied to the Internet and name three protocols frequently used on the Internet.

(5 marks)

- (iii). (a) Compare and contrast Static and Dynamic web sites.

(6 marks)

- (b) Identify the languages and standards used to produce a static website

(2 marks)

- (c) Identify the languages and standards used to produce a dynamic website.

(2 marks)

(Total marks 20)

(5).

- (i). What is Social Networking? (2 marks)
- (ii). Social networking sites (e.g. Facebook™, LinkedIn™, MySpace™, Twitter™, Flickr™) have become extremely popular, with Google Trends™ reporting that in mid-2009 the number of searches made for the term "social networking" exceeded those for "e-commerce".  
With specific reference to one or more contemporary social networking platforms:
  - (a) Identify three distinct risks or dangers that might result from active participation with social networking sites. (3 marks)
  - (b) Discuss how a user can reduce these dangers while actively maintaining a presence on social networking sites. (5 marks)
- (iii). Give three advantages of electronic commerce over traditional commerce? (3 marks)
- (iv). What are the usability-related goals of an e-commerce web site? (5 marks)
- (v). When using an e-commerce site, you can determine if the current page is secure in two ways. Describe those two ways. (2 marks)

(Total marks 20)

(6).

- (i). (a) Identify four common Internet security risks faced by computer users. (4 marks)
- (b). Recommend suitable measures that can be taken against each. (4 marks)
- (ii) In the context of computer security, briefly describe the following:
  - a) SSL
  - b) Firewall
  - c) Data Encryption (12 Marks)

(Total marks 20)

(7).

- (i). What is referred to as Markup in a Markup Language? (2 marks)
- (ii) What is CSS? (5 marks)
- (iii). For each of the following, state what the acronym stands for:
  - (a) XML
  - (b) SMTP
  - (c) FTP
  - (d) TCP/IP
  - (e) W3C (5 marks)

(iv). Write HTML markup to produce the following output:

(8 marks)

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**OUR VISION**

"To become the centre of excellence in technological education in Sri Lanka "

**OUR MISSION**

*"Creating Excellent Higher National Diplomats with modern technology for sustainable development"*

**SLIATE COURSES**

- HNDIT
- HNDE
- HNDM
- HNDA
- HNDBS

(Total marks 20)

(8).

(i). Write the output of the following HTML code.

(10 marks)

```

<HTML>
<HEAD>
  <TITLE>table</TITLE>
</HEAD>
<BODY>
  <table border="5">
    <tr>
      <th rowspan="2"> Name</th>
      <th colspan="2"> Clubs Scores </th>
    </tr>
    <tr>
      <th> Scores </th>
      <th> Places</th>
    </tr>
    <tr>
      <td>A</td>
      <td>56</td>
      <td>Third</td>
    </tr>
    <tr>
      <td>B</td>
      <td>75</td>

```

```

        <td>Second</td>
    </tr>
    <tr>
        <td>C</td>
        <td>40</td>
        <td>Forth</td>
    </tr>
    <tr>
        <td>D</td>
        <td>90</td>
        <td>First</td>
    </tr>
</table>
</BODY>
</HTML>

```

(ii). Write HTML markup to produce the following output:

(10 marks)

### Register

Name:

Gender:

☐ Male

☐ Female

☐ Completed O/L

☐ Completed A/L

Username:

Password:

(Total 20 marks)