Grade 11

## Lesson Three Information & Communication Technology

Part II

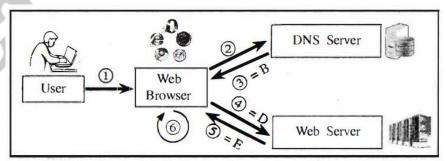
- 1. A company uses its own file server to store electronic documents, spreadsheets and images. In order to reduce the cost it decides to store these files in a cloud based (online) drive. (2016)
  - a) Write down one benefit of using a cloud based (online) drive in addition to reducing the cost.
  - b) Write down one disadvantage of using the cloud based (online) drive.
- 2. Consider the following table with four statements relating to the Internet indicated by letters P to S given in the first column. (2016)

P - Large collection of electronic documents	HTTP
Q - Transfer large files from one computer to another over the Internet	DNS
R - Translates a URL to an IP address	FTP
S - A protocol to access web pages	WWW

Match the statements given in the first column to the correct term from the second column. Write down the letter for the statement and the correct term in your answer book.

- 3. Determine whether the following statements are True or False. Write down the statement number and whether the statement is True or False. (2017)
  - 1) Internet Protocol (IP) address is used to uniquely identify a computer on the Internet.
  - 2) File Transfer Protocol (FTP) is used to transfer files between remote computers.
  - 3) Hypertext Transfer Protocol (HTTP) is used to exchange html documents.
  - 4) Files and folders in a cloud computing environment can be accessed without an Internet connection
- 4. The following steps A F show the process of visiting the http://www.nie.lk web page by a user, (2017)
  - A- Request to translate www.nie.lk domain name to the IP address is sent to the DNS (Domain Name Server)
  - B- DNS returns the IP address 222.165.180.150
  - C- Web browser renders the HTML web page
  - D- Web browser sends a 'http Get' request to the webserver with the IP address 222.165.180.150
  - E- Webserver with IP address 222.165.180.150 returns the html data stream
  - F- User opens the web browser and enters 'http://www.nie.lk'

The following diagram shows the process related to the above list of steps. The labels 3, 4 and 5 are matched with steps B, D and E respectively. Match the remaining steps with the labels 1, 2 and 6 in the diagram in the correct order. Write down the label and the corresponding step.



5. The column on the left lists three types of cloud computing services (labeled A - C) and the column on the right describes some of the services provided by each (labeled X - Z). Match items in the two columns and write down the corresponding pairs using their labels. (2018)

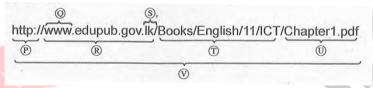
A - Infrastructure as a Service (IaaS)	X - Provides software installed in the cloud [Example: Google Docs]
B - Software as a Service (SaaS)	Y - Provides necessary server environment for software development [Example: Google App Engine
C - Platform as a Service (PaaS)	Z - Provides facilities such as servers, network, storage, etc. [Example: Amazon Web Services (AWS)]

6. Use the following list of terms in answering questions (a) and (b) below.

(2018)

List of terms: { DNS server, domain name, FTP, IP address, mail server, path to resource, protocol, resource, SMTP, spam mail, streaming server, top level domain, uniform resource locator (URL), web server, World Wide Web (WWW) }

a) Identify the correct term from the above list for labels P - V below and write the correct terms against the label.



b) Match the descriptions given in A - D with the correct terms from the list given above and write down the relevant term against the label.

	· ·
A	Delivers web pages to clients using HTTP
В	Helps uniquely identify a computer on the internet
С	Every email that is sent passes through a series of this type of servers along its way to its intended recipient
D	Unwanted email messages

7. Kamal sent an e-mail message to Hameed, Meena, Sharma and Gihan as shown by the email header given below. (2019)

To: hameed, meena
CC: sharma
Bcc: gihan

Write down whether the following two statements labelled A and B are True (T) or False (F). (In your answer, write the statement label and the T/F status.)

- a) Gihan can see that Hameed is a recipient.
- b) Sharma can see that Gihan is a recipient.
- 8. Consider the following statements with blanks labelled A F. Identify the most suitable term to fill each blank from the list given below. Write down the statement label and the matching term. (2019)
  - A- .....determines the correspondence between domain names and IP addresses on the Internet.
  - B- ..... is used to transfer large files from one computer to another over the Internet.
  - C- ...... is one of the most important protocols for email transport between email servers.
  - D- ...... is the top level domain of the domain name www.nie.lk.
  - E- .... could be used to find out web pages whose URLs are not known.
  - F- .....separates the user name and domain name of an email address.

List: (# symbol, @ symbol, DNS service, FTP, HTTP, ICMP, IP address, IP service, lk, nie.lk, Search engines, SMTP, URL)

- 9. Write down two advantages of using SaaS (Software as a Service), which is a cloud computing service, for an institute. (2020)
- 10. Match the descriptions labelled P S with the correct terms from the list of terms given below and write down the relevant term against each label in the label → term format. (2020)

Label	Description
P	Identifies a computer uniquely on the Internet
Q	Connects a web page to another web page
R	Converts a domain name into an IP address
S	Used for the communication between a web server and a web browser

List of terms: {FTP, IP address, Pagelink, SMTP, DNS, URL, HTTP, Hyperlink}

11. Match the descriptions labelled P - S with the correct terms from the list of terms given below and write down the relevant term against each label in the label → term format. (2021)

Label	Description
P	Used for electronic mail exchange among mail servers on the Internet
Q	Provides access to the software installed in the cloud
R	Folder to store mails that are composed to be sent, but not completed yet
S	Used to uniquely identify a computer on the Internet

List of terms: {FTP, SMTP, URL, IP address, IaaS, Trash, Draft, SaaS}

12. Match the descriptions labelled P - S with the correct terms from the list given and write the relevant term against each label in the label → term format. (2022)

Label	Description
P	Used for the communication between web server and web client
Q	Used to uniquely identify a web page in a web server
R	Used to identify a computer uniquely on the Internet
S	Used to transfer emails between two email servers

List: {DNS, email address, FTP, HTTP, hyperlink, IP address, SMTP, URL}

- 13. Choosing from the examples given in the list, write down the correct example suitable for each of the labelled items A to G given below in the label → example format. (2022)
  - A A content management system
  - B A top level domain name
  - C A web browser
  - D A search engine
  - E A social network
  - F- A cloud computing service
  - G-A programming language used for web page development

List: {.lk, Firefox, Google, IaaS, Pascal, PHP, Twitter, WordPress, www.nie.lk}