kasneb

DICT LEVEL II

INTERNET SKILLS

TUESDAY: 26 November 2019.   Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question.

QUESTION ONE

(a)   (i)   Explain four Boolean operators used for information searching on the internet.   (4 marks)

   (ii)   Outline five elements on the search results page for a web search engine.   (5 marks)

(b)   Highlight five features of an internet auction website that supports e-commerce.   (5 marks)

(c)   Explain two features of an effective antivirus software running on the internet.   (2 marks)

(d)   Outline four ways of enhancing the usage of a blog website on the internet.   (4 marks)
   (Total: 20 marks)

QUESTION TWO

(a)   Define the following terms:

   (i)   Hyperlink.   (2 marks)

   (ii)   IP address.   (2 marks)

   (iii)   Junk mail.   (2 marks)

(b)   Ben Zombo noticed that when saving a local copy of a webpage using the "Save as" option, the web browser provides him with a variety of choices.

   List four different file types that Ben Zombo could use to save the webpage in a given browser.   (4 marks)

(c)   Dynamic host configuration protocol (DHCP) relieves the work of the network administrator by automating some services.

   Highlight four TCP/IP configuration information allocated to DHCP clients by the DHCP server.   (4 marks)

(d)   Consumers and organisations have many different reasons for choosing to use cloud-computing services.

   Required:
   (i)   Suggest two infrastructural challenges to the implementation of cloud computing services.   (2 marks)

   (ii)   Examine four reasons why an organisation would deploy cloud computing services.   (4 marks)
   (Total: 20 marks)

QUESTION THREE

(a)   Explain three types of uniform resource locators (URLs) used in web addressing.   (6 marks)

(b)   Outline three differences between the internet and an intranet.   (6 marks)

(c)   Summarise four benefits that make emails a preferred form of communication.   (4 marks)

(d)   List four examples of web browsers.   (4 marks)
   (Total: 20 marks)

QUESTION FOUR

(a) The structural components of a web application defines the functionality in which a user interacts with the internet, the control and the database storage.

In relation to the above statement, analyse three types of the structural components of a web application, citing an example of a development platform in each case. (9 marks)

(b) Describe each of the following internet connections:

    (i)   Gateway access. (2 marks)

    (ii)   Shell connection. (2 marks)

(c) Allocation of internet protocol (IP) addresses is delegated to a few regional internet registries (RIRs).

List any three RIRs. (3 marks)

(d) Hypertext transfer protocol (HTTP) is important for transfer of various data formats between the server and the client.

Enumerate the four basic steps in HTTP communication model. (4 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Analyse the impact of six major information gathering tools on the internet on individual privacy. (6 marks)

(b) Explain the following terms as used in internet infrastructure:

    (i)   Packet switching. (1 mark)

    (ii)   Routing algorithm. (1 mark)

    (iii)   Internet layer. (1 mark)

    (iv)   Border gateway protocol. (1 mark)

(c) In the context of client-server architecture of the internet:

    (i)   Identify three types of clients in a client/server model. (3 marks)

    (ii)   Explain three characteristics of clients in a client/server model. (3 marks)

(d) Using examples explain the technologies used for internet connectivity in the "First Mile" and the "Last Mile". (4 marks)

(Total: 20 marks)

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