



kasneb

DICT LEVEL II

INTERNET SKILLS

MONDAY: 30 August 2021.

Time Allowed: 3 hours.

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

QUESTION ONE

- (a) The internet being network based is greatly defined “by emerging trends” in computing. Highlight three trends that affect/will affect internet in future. (6 marks)
- (b) (i) List two popular web browsers. (2 marks)
- (ii) Describe three considerations/checks that you may need to put in place to ensure you avoid content incompatibility with web browsers. (6 marks)
- (c) Explain the following terms as used in internet technologies:
- (i) ARPANET. (2 marks)
- (ii) Usenet workgroups. (2 marks)
- (iii) Malware. (2 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) State four client side scripting languages. (4 marks)
- (b) Tom has developed a website for his business and wishes to have the website hosted online. Explain three types of web hosting that he could consider. (6 marks)
- (c) Summarise five communication services offered by the internet. (5 marks)
- (d) Outline five main features of Web 3:0. (5 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) A uniform resource locator (URL) is a specific type of uniform resource identifier (URI).
- Required:**
- (i) Distinguish between “URL” and “URI”. (2 marks)
- (ii) Explain four parts that forms a URL. (4 marks)
- (b) Describe three controls an organisation may implement to mitigate against system penetration. (6 marks)
- (c) Explain the following terms:
- (i) Bandwidth. (2 marks)
- (ii) Bookmark. (2 marks)
- (iii) Cookie. (2 marks)
- (iv) Virtual community. (2 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) Explain the following terms as used in e-commerce:
- (i) Price transparency. (1 mark)
 - (ii) Disintermediation. (1 mark)
 - (iii) Consumer-to-consumer commerce (C2C). (1 mark)
 - (iv) Behavioural targeting. (1 mark)
- (b) Assess five benefits of cloud computing. (5 marks)
- (c) (i) Citing a relevant example, explain the term network architecture. (2 marks)
- (ii) Distinguish between two-tier and three tier client server architecture. (4 marks)
- (d) Define the following terms:
- (i) Denial of service. (1 mark)
 - (ii) Adware. (2 marks)
 - (iii) IP spoofing. (2 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Explain two technologies used to enable Internet of Things (IoT). (2 marks)
- (b) Define the following terms used in search engines:
- (i) Robots. (1 mark)
 - (ii) Spiders. (1 mark)
 - (iii) Metacrawlers. (1 mark)
- (c) Explain the following internet threats:
- (i) Pharming. (2 marks)
 - (ii) SQL injection. (2 marks)
 - (iii) Social engineering. (2 marks)
- (d) Explain the functions of each of the following TCP/IP protocol suite elements:
- (i) Internet control message protocol. (2 marks)
 - (ii) Transmission control protocol. (2 marks)
 - (iii) User datagram protocol. (2 marks)
- (e) The File Transfer Protocol (FTP) is one of the main protocols in data transmission. Highlight three functions of this protocol. (3 marks)
- (Total: 20 marks)**
-