

# KASNEB

## DICT LEVEL II

### INTERNET SKILLS

#### PILOT PAPER

September 2015.

Time Allowed: 3 hours.

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

#### QUESTION ONE

- (a) Describe the following internet terms indicating how each could be used to create business value:
- (i) Telnet. (4 marks)
  - (ii) FTP. (4 marks)
- (b) The service oriented architecture enables heterogenic access of cloud computing services.
- In light of this statement, explain the following cloud computing terms:
- (i) Hybrid cloud. (3 marks)
  - (ii) Platform as a service (Paas). (3 marks)
- (c) List three advantages and three disadvantages of cloud computing. (6 marks)
- (Total: 20 marks)**

#### QUESTION TWO

Babati Medical Centre intends to set up an internet connection to serve hospital services remotely. You have been hired to advise the hospital on how to go about this.

#### Required:

- (a) Advise the hospital on the viability of:
- (i) Wireless internet connection. (6 marks)
  - (ii) Wired internet connection. (6 marks)
- (b) Explain why the hospital might need:
- (i) An internet domain name. (2 marks)
  - (ii) The services of an Internet Service Provider (ISP). (2 marks)
- (c) Advise Babati on four security measures that might protect the hospital from internet security threats. (4 marks)
- (Total: 20 marks)**

#### QUESTION THREE

- (a) Outline the characteristic differences between web 2.0 and web 3.0 as semantic generations of the world wide web. (6 marks)
- (b) Citing examples, explain each of the following internet security controls:
- (i) Procedural. (2 marks)
  - (ii) Physical. (2 marks)
  - (iii) Logical. (2 marks)

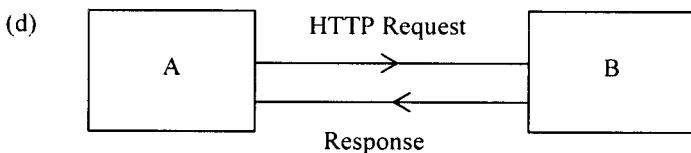
- (c) (i) Define the term "search engine optimisation". (2 marks)
  - (ii) Explain how the following techniques could be used in search engine optimisation.
    - i. Indexed searching. (2 marks)
    - ii. Content navigation. (2 marks)
    - iii. Multiple site linkage. (2 marks)
- (Total: 20 marks)**

**QUESTION FOUR**

- (a) Describe the following protocols as used in internet applications:
    - (i) SMTP. (2 marks)
    - (ii) HTTP. (2 marks)
    - (iii) POP3. (2 marks)
  - (b) Explain three ethical issues that are brought about by internet connectivity. (6 marks)
  - (c) Explain how the following internet services can be used in a business environment:
    - (i) Web blogs. (2 marks)
    - (ii) Newsgroups. (2 marks)
  - (d) Data terminal equipments are also known as 'sinks' in computer networks. List any four such devices. (4 marks)
- (Total: 20 marks)**

**QUESTION FIVE**

- (a) Explain any two legal mechanisms that could be used to enhance or preserve privacy of data and information. (6 marks)
- (b) Social media has enhanced social interactivity of people in society.  
Justify the above statement. (4 marks)
- (c) (i) List two examples of web servers. (2 marks)
- (ii) Explain four functions of a web server. (4 marks)



In the context of a distributed environment illustrated above:

- (i) Identify items A and B. (2 marks)
  - (ii) Identify the software used in A and B to enable the model's functionality. (2 marks)
- (Total: 20 marks)**
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