

# KASNEB

## DICT LEVEL II

### COMPUTER SUPPORT AND MAINTENANCE

WEDNESDAY: 18 November 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 three categories of optical disk drive performance measures. (6 marks)
- (b) Explain the function of each of the following tools when assembling a computer system:
- (i) Tweezer. (2 marks)
  - (ii) Flashlight. (2 marks)
- (c) Describe a type of maintenance activity which could be carried out on each of the following components of a computer system:
- (i) Software. (2 marks)
  - (ii) Data. (2 marks)
- (d) Explain three compatibility issues that should be sorted out when installing or replacing a system motherboard. (6 marks)
- (Total: 20 marks)**

#### QUESTION TWO

- (a) Explain the cause of the following error messages which could be observed during installation of software on different computers:
- (i) Drive not ready. (2 marks)
  - (ii) No boot device present. (2 marks)
  - (iii) Cannot read CAB files. (2 marks)
- (b) Describe three ways in which computer viruses could cause loss of data in a computer. (3 marks)
- (c) Naliaka has two computers, one with a processor labelled core i3, and the second, core i7.
- Required:**  
Suggest four technical advantages that the processor labelled core i7 would have over core i3. (4 marks)
- (d) Outline instances when memory mapping would be:
- (i) Most useful. (4 marks)
  - (ii) Less useful. (3 marks)
- (Total: 20 marks)**

#### QUESTION THREE

- (a) Describe the seven processor modes of an operation. (7 marks)
- (b) Information technology has become an inseparable part of our lives and an essential tool in every field. But, with increasing number of computer users, the number of health issues are also growing at a rapid pace.

**Required:**

- (i) Highlight six health problems that are common with computer usage. (6 marks)
  - (ii) Suggest seven ways that could be used to prevent computer-related muscle and joint injuries. (7 marks)
- (Total: 20 marks)**

**QUESTION FOUR**

- (a) Distinguish between “integrated” and “non-integrated” system boards. (4 marks)
- (b) Nahashon Juma intends to purchase a new memory module to upgrade his desktop computer.

**Required:**

Explain to Nahashon Juma the following characteristics of a new memory module:

- (i) Heat spreader. (2 marks)
  - (ii) RAM latency. (4 marks)
  - (c) In five steps, outline the procedure of installing the memory module in (b) above. (5 marks)
  - (d) Outline five drawbacks of portable computers. (5 marks)
- (Total: 20 marks)**

**QUESTION FIVE**

- (a) (i) Explain the term “service-level agreement”. (2 marks)
  - (ii) Outline seven metrics that could be specified in a service-level agreement. (7 marks)
  - (b) Identify five components of a computer motherboard. (5 marks)
  - (c) Summarise six attributes of a computer power supply. (6 marks)
- (Total: 20 marks)**
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