



DIPLOMA IN INFORMATION AND COMMUNICATION TECHNOLOGY

END OF TERM EXAMINATION

DEPARTMENT: COMPUTING AND INFORMATION TECHNOLOGY
COURSE CODE: DICT0211
COURSE TITLE: HARDWARE MAINTENANCE AND NETWORKING
CAMPUS: ROYSAMBU
EXAM DATE: AUGUST 2025
TIME: 1400HRS – 1700HRS

SECTION A (COMPULSORY)

Question ONE:

- a) Describe two factors to consider when determining the amount of memory to be allocated on user computer. **[2 Marks]**

- b) Organizations' run scheduled monthly, quarterly or yearly computer hardware maintenance. Outline four reasons IT managers consider maintenance significant for their hardware and software systems. **[4 Marks]**

c) Explain the impact of a failed CMOS battery on the functioning on a computer.
[2 Marks]

d) Discuss the benefit of using the process of elimination in troubleshooting computer problems.
[2 Marks]

SECTION B

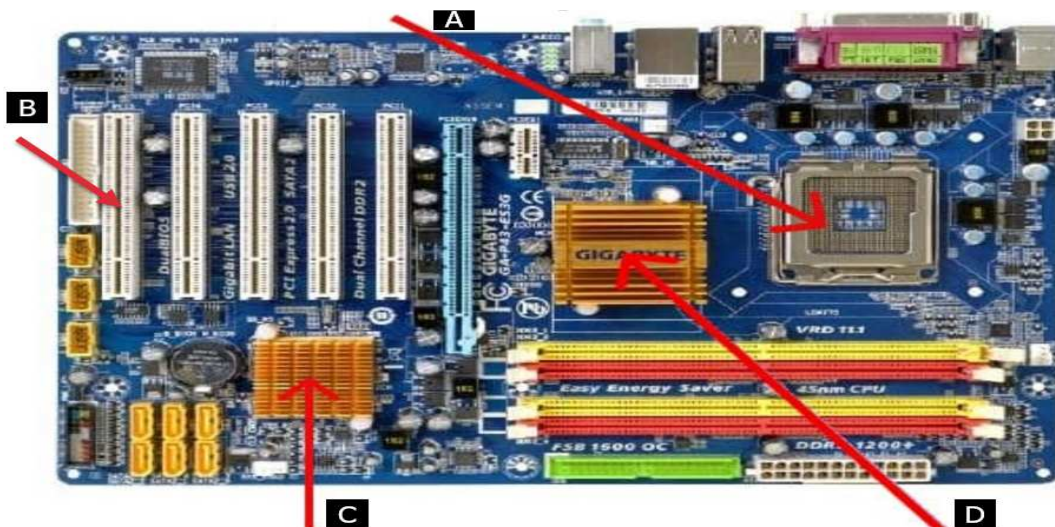
(Answer any THREE (3) Questions in this section)

Question TWO:

IT technician is trying to print out invitations for a birthday party, but the printer won't print. The technician has some ideas about what could be causing this. Describe five steps the IT Technician will consider in resolving this issue.
[10 Marks]

Question THREE:

a) Explain the functions of the following highlighted parts of the mother board.
[8 Marks]



- b) Organizations interconnect computers in order to enhance efficiency and effectiveness of service delivery to its users and customers. Outline two benefits of computer networks in an organization. **[2 Marks]**

Question FOUR:

- a) Mary would like to secure her home computer. Explain three security techniques she can put in place to ensure her computer is secure. **[6 Marks]**
- b) IT Technician notices that a user PC has been taking longer and longer to load programs. Highlight four steps the technician would take to resolve this issue. **[2 Marks]**
- c) Caleb was using his computer in class. In the process of transferring data to USB data storage, he discovers that the USB port is dysfunctional. Outline two methods Caleb can use to resolve the problem. **[2 Marks]**

Question FIVE:

- a) A company is having eight station Local area network installed. Giving reasons, identify two Network topologies that could be used for the LAN structure. **[4 Marks]**
- b) In computer networks, Network Administrators use different networking devices that may be connection-oriented or connection-less in nature. Cables to connect devices physically in order to provide a path for data transmission. Explain three adverse effects of using a longer length cable than the prescribed length on the network and its functionalities. **[6 Marks]**

Question SIX:

- a) Discuss two benefits an organization can realize by embracing green computing.

[4 Marks]

- b) A network is the interconnection of a set of devices capable of communication. Describe the major criteria that a Data communication Network must meet to ensure effective and efficient communication between interconnected devices.

[6 Marks]