



SCHOOL OF SCIENCE & TECHNOLOGY
2023/2024 FIRST SEMESTER EXAMINATION

CLASS: ND II, COMPUTER SCIENCE (FT & PT)

COURSE: COM 214 (COMPUTER SYSTEM TROUBLESHOOTING)

TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER 4 QUESTIONS FROM SECTION A, 1 QUESTION FROM SECTION B

SECTION A

Question 1

- 22/10/2024
- List 5 problems MODEMs are likely to encounter and recommend solutions for each. (5 Mks)
 - With the aid of a diagram, describe how the MODEM works. (7 Mks)
 - Distinguish between power up, boot up and start up. (8 Mks)
 - List five possible causes of Windows Start up failure.

Question 2

- Define the term 'Illegal Operation' (7 Mks)
 - List 8 causes of illegal operation
- List and explain five solution to correct illegal operations of a system. (7 Mks)
 - Describe the Zero hour virus.
- Distinguish between the:
'Unlicensed Virus Protection Utility' and 'Outdated Virus Protection Utility'. (6 Mks)

Question 3

- List the two common ports/ connectors that connect Printers to PC. (4 Mks)
- Distinguish between the following:
'Switch' and 'Router'
TCP and UDP (12 Mks)
- State the causes and solutions for the following Network Problems
Congestion
File Check Sequence Errors (FCS)
Collision Error
Unknown Protocol (4 Mks)

Question 4

- List and explain four common problems in a wireless network.
 - Recommend solutions for each of 5a (i) (8 Mks)
- Outline eight (8) troubleshooting guidelines when printing problems exist. (8 Mks)
- A student was asked to network systems in the ICT, Name two topologies she is likely to employ and problems she is likely to occur in each topology. (4 Mks)

Question 5

- a. (i) List five (5) problems that are related to COM, LPT and USB failure. (5 Mks)
- b. Distinguish between the following. (5 Mks)
Parallel Port and LPT (ii) Serial Port and COM
- c. With the aid of a diagram, describe the Europe/China USB type A connector. (10 Mks)

SECTION B

Question One

- 1ai. Explain common issues with peripheral devices (e.g., printers, external drives) and how to troubleshoot them. (4marks)
- 1aii. Discuss four (4) potential causes of failure in virus protection utilities and how to address them. (4marks)
- 1aiii. Name two software diagnostic tools used for troubleshooting software-related issues on a computer system. (2marks)
- 1bi. Name and describe two diagnostic tools used for troubleshooting peripheral device failures. (5marks)
- 1bii. Why is documenting the steps taken and outcomes during the fault diagnosis process important? How does it aid in future troubleshooting efforts? (5marks)

Question TWO

- 2ai. Describe the five (5) steps you would take to identify the source of a computer system issue where the screen remains blank upon startup. (5marks)
- 2aii. Compare and contrast the functionality of disk utility tools available on Windows, macOS, and Linux systems. (3marks)
- 2aiii. Outline the steps you would take to troubleshoot a malfunctioning external hard drive that is not being recognized by the computer. (3marks)
- 2bi. How would you diagnose and troubleshoot issues related to faulty RAM? In Five (5) steps. (5marks)
- 2bii. Describe the steps you would take to troubleshoot a network connection issue where a computer cannot connect to the internet. (4marks)