

PAN AFRICA CHRISTIAN UNIVERSITY

BACHELORS OF INFORMATION COMMUNICATION TECHNOLOGY

END OF TERM EXAMINATION

DEPARTMENT: COMPUTING & INFORMATION TECHNOLOGY

COURSE CODE: BIT 308

CAMPUS: ROYSAMBU

COURSE TITLE: COMPUTER NETWORKS

EXAM DATE:

TIME:

INSTRUCTIONS

- This exam carry a total of SIX Questions of [10 Marks Each]
- Section One (I) is compulsory.
- Answer any 3(Three) Questions from Section Two (II)
- Read all questions carefully before attempting.

Section One Compulsory 10 marks

Question One.

- a) Give two experimental approaches to test any Network Functionality. **[2 marks]**
- b) Discuss how Pan African University Network is designed to meet the following Goals.
- i. Functionality
 - ii. Scalability
 - iii. Adaptability
 - iv. Manageability **[8 marks]**

Section Two Attempt any Three Questions.

Question Two.

- a) Illustrate THREE approaches of overcoming signal attenuation. **[6 marks]**
- b) Dude is one of the network scanning tools from mikrotic.com, Illustrate two of its experimental outcomes in network scanning. (*Conceal the identity of the concept /tool*) **[4 marks]**

Question Three

- a) Analyze THREE Network transmission impairment experienced in Network operations and how each could be avoided. **[6 Marks]**
- b) Fast-Resolver is one tool which can be used in IP Spoofing for common network attacks Identify its key features. **[4 marks]**

c) Question Four

- a) Analyze FOUR major challenges associated with most wireless Network Implementations. **[8 marks]**
- b) Analyze the appropriate remedies for the following network bottlenecks.
- i. Crosstalk. **[1 mark]**
 - ii. Signal Attenuations. **[1 mark]**

Question Five.

Discuss FIVE functions and operation of an Intrusion detection system. **[10 marks]**

Question Six.

Analyze the following tools and components used in network construction and cabling setup.

- i. Crimping Tool. **[2 marks]**
- ii. Punch down Tool. **[2 marks]**
- iii. Cable Tester **[2 marks]**
- iv. RJ 45 and RJ 11 **[2 marks]**
- v. Patch Panels **[2 marks]**

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