

# **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 Pan African University Network how it is designed to meet the following Goals.  
Functionality  
Scalability  
Adaptability  
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 experiments outcomes. **[4 marks]**

### **Question Three**

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

### **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 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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