NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi – Abuja

FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER SCIENCE

2022_1 POP Examination ₍sao₎

Course Code: CIT461
Course Title: INTERNET ARCHITECTURE AND COMMUNICATIONS
Credit: 3 units
Time allowed: 3 Hours
Instruction: Answer Questions **ONE (1)** and any other **THREE (3)** Questions

QUESTIONS

1a.   Explain the term 'Internet Protocol'. **(9marks)**
1b.   Explain classes C and D of IP Addresses. **(8marks)**

1c.   State four (4) useful messages generated by Internet Control Message Protocol (ICMP) **8marks**

2a.   Write short note on the two (2) fields of IP Addresses **(6marks)**
2b.   Write short note on the following: **(9marks)**
    i.   Bridges
    ii.   Brouters
    iii.   Gateway

3a.   Explain Internet Control Message Protocol (ICMP). **(4marks)**
3b.   State the advantages of bridges over routers. **(6marks)**
3c**.**   Activities of e-business transactions over the internet makes it prone to risks. Enumerate any five (5) security concerns of e-business. **(5marks)**

4a.   List and explain the two types of Ethernet Hubs. **(6marks)**
4b.   List and explain the two popular approaches to packet switching. **(9marks)**

5a.   List and discuss any three security measures for e-business systems. **(9marks)**
5b.   State three main equipment required for internet access **(6marks)**
    i.   Router[0.5marks]
    ii.   Network Interface Card[1marks]
    iii.   Ethernet Cable[1marks]

6a.   Write short note on the four (4) levels of ISPs. **(8marks)**
6b.   Describe classes A and B of IP Addresses. **(7marks)**