NATIONAL OPEN UNIVERSITY OF NIGERIA

University Village, 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja

FACULTY OF SCIENCES

NOVEMBER, 2018 EXAMINATIONS

COURSE CODE: CIT461

COURSE TITLE: Internet Architecture and Communications

CREDIT: 2 Units

TIME ALLOWED: 2 Hours

INSTRUCTION: Answer Question ONE (1) and any other THREE (3) Questions

1a) Give a brief introduction of the Internet ?   *(3 marks)*

b) State three advantages and three disadvantages of Integrated Services Digital Network (ISDN)

(3 marks)

c) State advantages and disadvantages of HTML   *(3 marks)*

d) State the responsibility(ies) of the IP   *(2 marks)*

e) List any four kinds of useful messages Internet Control Message Protocol (ICMP) generates.

(2 marks)

f) List and describe the four basic types of Destination-unreachable messages ICMP generates.   *(6 marks)*

g) The Internet protocol suite includes many application-layer protocols that represent a wide

variety of applications, List and state the function of any four of such protocols. *(6 marks)*

2a) List and write short notes on any four classes of IP addresses   *(10 marks)*

b) Write short notes on ICMP Router-Discovery Protocol (IRDP) *(5 marks)*

3a) List and describe user interface elements that can be found on any major web browsers.

(6 marks)

b) With the aid of illustrative diagram, explain the levels of ISPs that you considered important

for efficient Internet Service Provisioning.   *(9 marks)*

4a) List the methods of connecting three computers to the internet *(1½ marks)*

b) Discuss (with appropriate diagram where necessary) any two of the methods listed in Question (4a)

above and stating the hardware requirement of each method.   *(12 marks)*

c) What do you understand by the term " Multicasting"?   *(1½ marks)*

5a) State and briefly explain the goals common to all network connectivity projects regardless of network

size   *(6 marks)*

b) State advantages and disadvantages of Microsoft ICS   *(6 marks)*

c) State the main functions of the Internet Protocol (IP)   *(3 marks)*