

## NATIONAL OPEN UNIVERSITY OF NIGERIA University Village, 91 Cadastral Zone, NnamdiAzikwe Expressway, Jabi, Abuja FACULTY OF SCIENCES APRIL, 2019 EXAMINATIONS

COURSE CODE: CIT461 COURSE TITLE: Internet Architecture and Communications CREDIT: 3 Units TIME ALLOWED: 2<sup>1</sup>/<sub>2</sub> Hours INSTRUCTION: Answer Question 1 and any other FOUR (4) Questions

1a) Define Internet? (1 mark)
b) How is the internet related/ linked with ARPAnet? (3 marks)
c) Describe the Internet protocol layer and list its functions. (6 marks)

d) Enumerate the various elements of interface used by a web browser (*5 marks*)
e) List, with an example, five types of software packages that are needed for web designs. (*5 marks*)

f) What is navigation button (2 marks)

2a Discuss in details the components of an E-mail. (9 marks)

b) ) Briefly describe the client-server architecture using http setup. (3 marks)

3a) What is ISDN? (3 marks)

b) What are the characteristics of:

i) ISDN Basic Rate Interface (BRI)? (3 marks)

ii) ISDN Primary Rate Interface (PRI)? (2 marks)

c) Enumerate the features of web browsers. (4 marks)

4a) In order to implement an effective Internet connection strategy, there are a few factors that need to be considered and a few Internet connectivity requirements that need to be determined. Explain any FIVE of such requirements. (10 marks)b) What is tunnelling? (2 marks)

5a) List the two basic types of Web page designs with their characteristics. (5 marks)b) Outline and describe, in correct order, how a Web Search Engine works (7 marks)

6a) 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 Internet Connection Sharing (ICS) (3 marks)

c) State two advantages and four disadvantages of ISDN (3 marks)