NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
MAY/JUNE 2012 EXAMINATION

CIT 311 Computer Networks
Time: 3hrs

Instruction: Answer any five (5) questions.

1a. Give the full meaning of the following acronyms, within the context of computer networks:

i. GFC (2 marks)
ii. ATM (2 marks)
iii. PTI (2 marks)
iv. VPI (2 marks)

1b. Describe how the ATM protocol works. (12 marks)

2. Specify the status of the modem indicator light in the following settings:

2a. When the modem is powered up. (4 marks)

2b. If the computer is ready to send or receive data. (4 marks)

2c. When receiving a call. (4 marks)

2d. If the modem is sending data. (4 marks)

2e. When the modem detects the remote modem's carrier. (4 marks)

3a. Briefly explain the concept of ring topology. (4 marks)

3b. Give a good reason why asynchronous transfer modes are considered appropriate for
multimedia communication. (4 marks)

3c. State four (4) requirements for an efficient traffic control mechanism.
(12 marks)

4. Specify the main function of the following:

i. Routers
ii. Transport Layer)
iii. Bridges) 5 marks each
iv. Repeaters
v. Datagrams

(20 marks)

5a. Distinguish between Baseband and Broadband Communication. (10 marks)

5b. Give five (5) common applications of Integrated Services Digital Network (ISDN)

(10 marks)

6. Electronic mails have become very popular in transferring information, specify any ten
(10) features of this mode of information transfer. (20 marks)

7a. In the context of computer networks, what does the acronym RIP represent?

(1 mark)

7b. Describe three (3) common problems that can occur in RIP. (9 marks)

7c. State any five (5) tasks which a modem can perform. (10 marks)