

SCHOOL OF SCIENCE AND TECHNOLOGY October, 2013 Examination

COURSE CODE: CIT 311

COURSE TITLE: Computer Networks

CREDIT UNIT: 3

TIME: $2^{1}/_{2}$ hours

INSTRUCTION: Answer any five (5) questions. Each question carries 14

marks

1.(a) List and discuss three classifications of networks (8 marks)

(b) With the aid of a diagram give a brief description of the concept of star topology (6 marks)

- 2.(a) In transmission, what is the difference between full duplex and half duplex operations(6 marks)
- (b) List and discuss the sub layers of the Data link layer

(8 marks)

- 3. Stateseven typical routing protocols and their associated network operatingsystems (14 marks)
- 4.(a) What is the difference between Baseband and Broadband Communication (10 marks)
 - (b) Give any four regular applications of Integrated Services Digital Network (4 marks)
- 5.(a) Give the full meaning of the following acronyms within the context of computer networks:
- (i) VPI

(ii) VCI (4 marks)

(b) State any five task which a modem can perform (10

- 6. Specify the status of the modem indicator light in the following settings:
 - (i) When not receiving calls (4 marks)

(ii)When modem is getting data or a command from the computer (4 marks)

(iii) When Modem is sending data (4 marks) (iv) If the modem is powered up (2 marks)

- 7(a) List and discuss the two types of categories of an ATM connection (6marks)
 - (b) State and enumerate the three types of interfaces which an ATM switch supports. (8 marks)