

LAGOS CITY POLYTECHNIC, IKEJA
SCHOOL OF ENGINEERING AND APPLIED SCIENCE

DEPARTMENT OF ELECTRICAL/ELECTRONICS COMPUTER ENGINEERING

2013/2014 FIRST SEMESTER EXAMINATION

COURSE	TITLE:	SYSTEM	NETWORKING
	ESSENTIALS		NO OF QUESTIONS : 6
COURSE CODE:	CTE 230/NET 233	TIME ALLOWED:	2 HRS
FOR WHOM:	ND II	EE & CE	FT EXAMINER:
NO OF STUDENT:			INSTRUCTIONS: ANSWER
ANY FOUR			

QUESTIONS

1. (a) List and explain types of physical topology briefly.
 (b) List and explain briefly the 7 layers of the OSI model.

2. (a) Explain the relevance of networking basic to the changing IT world.
 (b) Differentiate between peer-to-peer network operating system and client-server network operating system.

3. (a) Define the followings:
 (i) Protocols (ii) IP addressing (iii) Network address
 (iv) IP subnetting (v) Subnet mask
 (b) What is the maximum number of IP address that can be assigned on a local subnet that uses the 255.255.255.224 subnet mask
 (c) State 4 benefits of subnetting.

4. (a) You need to subnet a network that has 5 subnets each with at least 16 hosts which classful subnet mask would you use?
 (b) How many hosts are available with a class B network.
 (c) You need to configure a server that is on the subnet 1902.168.19.24/29. The router has first available host address, which address would you assign to the server.

5. (a) List and explain the various layers of the OSI model.
 (b) Explain briefly the term network access methods
 (c) Explain the followings:
 (i) Collision avoidance (ii) Collision detection

6. (a) Differentiate between bounded media and unbounded media
 (b) State the features, advantages and disadvantages of the following network cables.
 (i) Copper twisted pair cable (ii) Coaxial cable
 (iii) Fiber optic cable
 (c) State the cable colour coding for straight through connection as regards twisted pair cabling.