LAGOS CITY POLYTECHNIC, IKEJA

SCHOOL OF ENGINEERING AND APPLIED SCIENCE

DEPARTMENT OF ELECT/ELECT COMPUTER ENGINEERING

2015/2016 SEMESTER EXAMINATION

COURSE TITLE: CIS NETWORKING **NO OF QUESTION: 6**
COURSE CODE: ICT 303 **TIME: ALLOWED: 2HRS**
FOR WHOM: HND YR I CE, EE P/T **INSTRUCTIONS: Answer any 4 questions**

1. (a) Compare and contrast the OSI model and the DOD model.
   (b) Explain network communication using the CISCO layer hierarchy model.
   (c) Explain the process of bringing up a Cisco router.
   (d) Explain briefly the 3(three) ways of accessing a Cisco router.
2. (a) When a router is first booted, where is the IOS loaded by default.
   (b) What is the purpose of configuring passwords on line configurations.
   (c) State 5 functions of a Cisco router
   (d) 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?
3. (a) How do you set your Telnet password on a router.
   (b) How do you set the password for the auxiliary port?
   (c) Which commands will encrypt your Telnet password on a Cisco router.
   (d) You need to configure a server that is on the subnet 192.168.19.24/29. The router has the first available host address, which address would you assign to the server?
4. (a) If you were designing a network and needed to break up collision domain, at which Cisco layer would you provide this function? and why?
   (b) List and explain any 7 protocols.
   (c) You need to subnet a network that has 5 subnets each with at least 16 hosts, which classful subnet mask would you use.
   (d) You work as a network consultant, you are planning a network installation for a large organisation named wilson solutions. The design requires 100 separate subnet works, so wilson solutions has acquired a class B network address. What subnet mask will provide the 100 subnet works required, if 500 usable host address are required per subnet.
5. (a) Your boss at Network solutions asks you why you are using a router to segment the main office. What are the benefits? What should I tell her?
   (b) Explain the steps of verifying the status of a Network connectivity.
   (c) State 8 components of a Cisco router.
   (d) You work as a network consultant, you are planning a network installation for a large organisation named wilson solutions. The design requires 100 separate subnet works, so wilson solutions has acquired a class B network address. What subnet mask will provide the 100 subnet works required, if 500 usable host

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