WORKFORCE DEVELOPMENT AUTHORITY

WDA

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ADVANCED LEVEL NATIONAL EXAMINATIONS, 2015, TECHNICAL AND PROFESSIONAL TRADES

EXAM TITLE: Networking

OPTION: Computer Electronics (CEL)

DURATION: 3hours

INSTRUCTIONS:

The paper is composed of **three (3) Sections**:

Section **I**: Nine **(9)** questions, all **Compulsory**.   **55marks**

Section **II**: Five (5) questions, **Choose Three (3) only**.   **30marks**

Section **III**: Three (3) questions, **Choose only One (1)**.   **15marks**

Every candidate is required to strictly obey the above instructions. Punishment measures will be applied to anyone who ignores these instructions.

Section I. Nine (9) Compulsory questions.   **55marks**

01. Give the clear meaning of the following:

    (i) MAC address

    (ii) Data link layer

    (iii) Hub

    (iv) 170.200.125.254

    (v) Ipconfig

    (vi) Multicast

    (vii) Flash Memory

    (viii) Netstat

    (ix) Mesh

    (x) 255.255.0.0   **30marks**

02. Define the following expressions:

    (a) the sequence within PDU

    (b) a computer network

    (c) Erase startup - config   **6marks**

03. Among the following ip, distinguish those in private from the ones not in private addresses: 172.32.100.100; 172.30.100.100; 10.255.100.100; 192.168.100.100.   **4marks**

04. Name the protocols used at transport layer of TCP/IP model.   **2marks**

05. What are the functions of presentation layer among the following? Addressing; Compression; Encryption and Authentication.   **2marks**

06. Write down two sub-layers of Data link layer in OSI model.   **2marks**

07. Convert the IP address 198.208.170.56 into binary form.   **3marks**

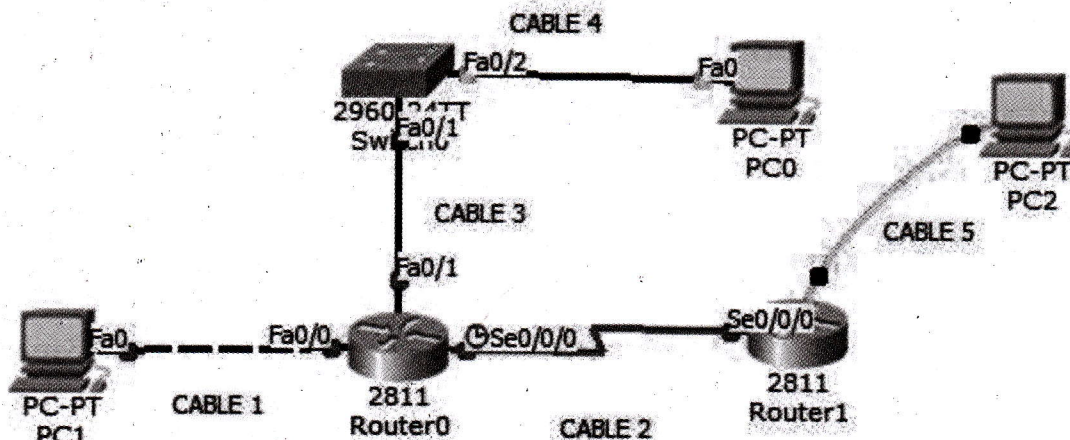**08.** Specify the range of loopback addresses.   **3marks**

09. What is nslookup?   **3marks**

Section II. Answer any three (3) questions of your choice

(Do not choose more than <u>three questions</u>).   30marks

10. Specify different types of cable that can be used to connected devices given on below network topology.   **10marks**

11. Define a network topology and discuss four (4) different types of Network topologies in computer network.   **10marks**

12. Differentiate peer to peer from client server network architecture.

10marks

13. Define network protocol and explain how the following protocols work.

   a. DHCP

   b. SMTP

   c. Telnet

   d. DNS

   e. FTP   **10marks**

14. a. What is a router?

   b. What is the difference between connection-oriented and connectionless network services? Give examples.   **10marks**

Section III. Answer any one (1) question of your choice

(Do not choose more than <u>one question</u>).   **15marks**

15. Discuss the following concepts:
    a. Local Area Network (LAN).
    b. Storage Area Network (SAN).
    c. Metropolitan Area Network (MAN).
    d. Wide Area Network (WAN).   **15marks**

16. Discuss the follow terms:
    a. Intranet.
    b. Extranet.
    c. Proxy Server.   **15marks**

17. Illustrate the seven layers of the OSI model and discuss functions
    of each layer.   **15marks**