FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

DEPARTMENT OF INFORMATION AND MEDIA TECHNOLOGY

SECOND SEMESTER 2015/2016 EXAMINATION

COURSE CODE:	CIT 322
COURSE TITLE:	PRACTICAL COMPUTER NETWORKS
CREDIT UNITS:	3
TIME ALLOWED:	2 hours
COURSE LECTURER:	M.E. Bima
NUMBER OF QUESTIONS:	Section A: 10 Fill-in The Blank Space Questions Section B: 10 Objective Questions Section C: 2 Theory Questions
NUMBER OF PAGES:	3 (INCLUDING THIS PAGE)

INSTRUCTIONS

- Write your **MATRICULATION NUMBER** on both Question and Answer booklets.
- **DO NOT** write your **NAME** on the Answer Booklet.
- Answer all questions
- **DO NOT** use red pen
- Please use a clear handwriting
- Only non-programmable calculators are allowed for this exam

SECTION A: (Fill in the blank spaces)

1. The Ethernet technology adopts _____ network topology.
2. Network Access layer of the TCP/IP network model comprises of _____ and _____ layers of the OSI reference model.
3. To solve the communication problem between multivendor devices, _____ approach was proposed.
4. There are _____ number of logical ports on every host node.
5. DoD network model is also known as _____
6. The three-way handshake is used to establish a _____ circuit
7. A router uses a _____ to store data about various destination networks.
8. CSMA/CD is a multiple access technique used in the Ethernet technology. It is an abbreviation for _____

9. Data at the Data link layer is known as _____.
10. Address Resolution Protocol resolves _____ to _____.

SECTION B (Objective Questions)

11. The Ethernet has a network speed of 10M__?

A, BPS   B, bPS   C, bps   D, bpS

12. Which of the following is not on the OSI reference model?

A, Network   B, Application   C, Network Access   D, Session

13. HTTPS protocol uses which port of the transport layer?

A, 80   B, 110   C, 23   D, 443

14. Which of the following devices operate on Layer 4 of the OSI reference model?

A, Router   B, Hub   C, Switch   D, None of the options

15. A transmission from a hub gets received by? (Select the most correct option)

A, The intended host   B, All connected hosts   C, A Remote Network   D, None of the options

16. Which of the following is a type of Flow Control? (Select all that apply)

A, Congestion Distortion   B, Congestion Avoidance   C, Buffering   D, All of the options

17. What is the first packet sent during a 3-way handshake.

A, SYN   B, ACK-SYN   C, AEK   D, ACK

18. Ethernet address is also known as _____ address

A, IP   B, MAC   C, port   D, house

19. RJ-45 connector is used to terminate

A, Coaxial Cable   B, Twisted pair cable   C, Fibre Optics Cable   D, All of the above

20. Frame relay is a type of circuit switching technology.

A, True   B, False   C, It depends

SECTION C (Theory Questions)

1. Determine the
   a. Subnet mask
   b. Network address
   c. Broadcast address
   d. Valid range and
   e. Number of host on each network

Of the first 3 Networks if you are assigned a network address of 172.25.0.0 with subnet mask of 255.255.0.0 by your ISP and are required to create 128 networks with it. (Show all workings)

2.
   a. While a packet is being routed to a destination network, the source and destination IP address remain constant until packet arrives destination. However, the source and destination MAC addresses keep changing. Explain why.
   b. What are the valid range of addresses for class A, B and C IP addresses?
   c. List and briefly explain any two classes of Routing protocols you know.
   d. List and briefly explain any two Layer 2 WAN protocol you know.

GOOD LUCK