EGERTON UNIVERSITY
COMP 315 – CAT

Instructions:
a) Answer ALL questions
b) Total Marks: 30
c) Each question @ 1 mark.

1. MTSO stands for _____
a) Mobile Tower Server Office
b) Mobile Telephone Server Office
c) Mobile Telephone Switching Office
d) None of the above

2. Small divisions of a given geographical area in cellular networks are known as:-
a) Shell
b) Cell
c) Core
d) Kernel

3. _____ is the process of converting plain text into cipher text.
a) Authentication
b) Decryption
c) Encryption
d) Compression

4. _____ is a packet switching system which uses idle voice channel for cellular system.
a) DSM
b) CDPD
c) CT-2
d) TDMA

5. CDMA uses the idea of tolerating interference by _____
a) Spread spectrum modulation
b) Intelligent modulation
c) Manchester coding
d) Bipolar non return to zero

6. In FDMA _____ is assigned between the spectrum of two adjacent users.
a) Interference band
b) Co-infer band
c) Guard band
d) Inference band.

7. Reducing the cell size to increase capacity is called?
a) Intelligent cell approach
b) Top down approach
c) Bottom up approach
d) Microcell approach

8. An antenna which attempts to direct all its energy in a particular direction is called?
a) Start antenna
b) Horn antenna
c) Disc antenna
d) Directional antenna

9. There are ten users each occupying a bandwidth of 4KHZ. If a guard band of 1KHZ is to be assigned, determine the total bandwidth of these ten users.
a) 49 KHZ
b) 52 KHZ
c) 100 KHZ
d) 230 KHZ

10. Stationary satellites are at an altitude of _____ above the earth.
a) 30000 km
b) 38000 km
c) 34500 km
d) 36800 km

11. State true or false: i) The effective antenna height changes when the location of the mobile unit changes. Ii) The absorption of radio waves by leaves and other vegetation does not cause foliage loss iii) The cell sites acts as an interface between the mobile unit and the MTSO.
a) true,true,false.
b)true,false,true
c)false,true,true
d) false,true,false

12. You want to able to walk around your production floor with a tablet PC checking inventory and order status on the database. The shop floor will need four AP's to provide adequate coverage area. What mode will allow you to stay wirelessly connected as you move between the four AP's?
a) Ad hoc
b) 802.1q
c)BSS
d)ESL
e)ESS

13. Which of the following is not a security scheme for WLANs?
a) WEP
b) WPA
c) 802.11i
d) MIMO

14. True/False? Multiple APs in the same ESS WLAN should be in the same VLAN.
a) True
b) False

15. What is a rogue AP?

a) An AP that has faulty component causing it to jam other APs by transmitting collision frames at maximum power.
b) An AP that can be easily moved to any location in the building.
c) An unauthorized AP that is installed to facilitate the capture of information.
d) An AP that does not follow the accepted WLAN standards but uses proprietary protocols instead.

16. Which option should you configure last when setting up your AP?
a) 802.11i settings
b) IP address and subnet mask
c) a/b/g mode
d) SSID.

17. What is the frequency range of the IEEE 802.11a standard?
a) 2.4Gbps   b) 5Gbps
c) 2.4GHz   d) 5GHz

18. What is the maximum data rate for the 802.11a standard?
a) 6Mbps   b) 11Mbps
c) 22Mbps   d) 54Mbps

19. A WLAN can create interference on other wireless devices but cannot itself be interfered with because of its high microwatt power distribution. True or False?

20. Individuals who actively search for wireless signals to pick up, often by just driving down the street, are participating in an activity known as?

21. GPS receivers can deduce their own location based on the mathematical principle of?

22. Cell phones use two main battery technologies ____ and ____
a) NiMH, Hi-LAY
b) Li-ion,Jin-Law
c) NiMH,Li-ion
d) Hi-Lay,Pi-ion

23. The first network based on packet radio, _____ was developed at the University of Hawaii in 1971.

24. In wireless communication what do you understand by asynchronous operation?

25. Suggest one solution to the problem of power consumption in mobile devices.

26. How does a sniffing attack compromise wireless network security?

27. Why is troubleshooting a wireless network more difficult than a wired network?

28. What scheme is applied in getting power to the AP on the tower?

29. In network design, what does optimizing involve?

30. What is a passive RFID?