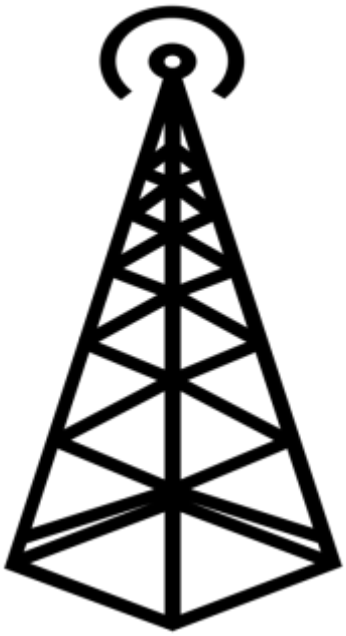

4th Year IT-IS-SW

MCQ

Choose

1. QoS =
   a) 1- Erlang B b) 1 + Erlang B c) 1-Erlang A d) none

2. Why neighboring stations are assigned different group of channels in cellular system?
   a) Minimize interference b) Maximize cell c) Maximize throughput d) Minimize area

3. Which of the following is a universally adopted shape of cell?
   a) circle **b) hexagon** c) triangle d) square

4. For a cellular system, if there are N cells and each cell is allocated k channel. What is the total number of available radio channels, S?
   a) S=N/K b) S=N-K **c) S=N*K** d) S=N+K

5. What is a cluster in a cellular system?
   a) Group of frequencies **b) Group of cells** c) Group of mobiles d) none

6. Capacity of a cellular system is directly proportional to
   a) Number of cells **b) Number of clusters replicated** c) Number of frequencies d) Number of users

7. A spectrum of 30 MHz is allocated to a cellular system which uses two 25 KHz simplex channels to provide full duplex voice channels. What is the number of channels available per cell for 4 cell reuse factors?
   a) 150 channels b) 600 channels c) 50 channels d) 85 channels

8. What is the condition for handoff?
   a) Move to different cell with idle b) remain in same cell with call **c) Move to different cell with call** d) remain in same cell with idle

9. Frequency division multiple access (FDMA) assigns _____ channels to _____ users

a) many, many b) Individual, many c) many, individual **d) <u>Individual, individual</u>**

10. During the period of call, other users can share the same channel in FDMA.

a) true **b) <u>false</u>**

11. If the FDMA channel is not in use, it can be used by other users.

a) true **b) <u>false</u>**

12. In CDMA many users can access the same channel in same time

a) <u>True</u> b) False

13. Hexagon shape is used for radio coverage for a cell because

a) Maximum coverage area b) Fewer number of cells required c) No intersections **d) <u>All</u>**

14. The advantage of using frequency reuse is

a) Increase capacity b) Reduce spectrum c) Can reuse same spectrum **d) <u>All</u>**

15. In Handoff

a) Transfer call to new cell b) Transfer call to new BS c) New channel allocated **d) <u>All</u>**

16. Traffic intensity is expressed in

a) <u>Erlang</u> b) MHz c) λ/sec d) a and c

17. Fading is caused due to

a) obstacles b) multipath c) Variation in amplitude and phase **d) <u>All</u>**

18. QoS (Quality of Service) tools are managed by ……..
a) <u>network</u> b) mobile c) OS d) none

19. QoS provide information about ……..
a) bandwidth b) probability of connectivity loss c) traffic measurements **d) <u>All</u>**

20. Battery management is the job of ……..
a) network b) base station **c) <u>OS</u>** d) none

21. The existing theories and guidelines to build mobile application are ……..
a) enough b) sufficient **c) <u>not sufficient</u>** d) none

22. …….. affects memory and CPU capacities
a) Mobility **b) <u>Size of device</u>** c) QoS d) none

23. which of these considered as dimensions of mobility
a) limited device b) limited power c) Location awareness **d) <u>All</u>**

24. …….. considered as method used for obtaining location information
a) Triangulation b) Scene analysis c) Proximity **d) <u>All</u>**

25. Base stations are connected via …….. to mobile
a) <u>wireless</u> b) wired c) satellite d) none

26. Base stations are connected via …….. to base station controller
a) wireless **b) <u>wired</u>** c) satellite d) none

27. ……. Used for routing calls

a) Base station b) Base station controller **c) Mobile switch center** d) none

28. ……. Used to store location of MS where billing and access information are maintained

a) VLR **b) HLR** c) AUC d) none

29. Each MS subscribes to …….

a) One MSC b) One BSC c) One BS d) ALL

30. If cell area increased then …….

a) Increase number of MS b) Increase number of channels c) A and b **d) none**

31. If 30 requests are generated in half hour and average holding time is 4 minutes then traffic load is ……Erlang

a) 4 b) 30 c) 120 d) 60

32. ……. Signal follows from base station to mobile station

a) Uplink **b) downlink** c) control link d) none

33. ……. is a probability of an arrival call being delayed

a) Erlang A b) Erlang B **c) Erlang C** d) none

34. ……. is the blocking probability, probability of loss or probability of rejection for an arrival call

a) Erlang A **b) Erlang B** c) Erlang C d) none

35. Assume that the offered traffic load is 5 and capacity n is 2 then QoS is …….

a) 0.33 b) 0.67 c) 1 d) none

36. ……. basically, represents the area that can be covered by a transmitting base station

a) antenna b) MSC c) BSC **d) <u>Cell</u>**

37. ……. defined as frequency band or channel in a cell can be reused in another cell if those cells are apart and there would be no interference

a) <u>Frequency Reuse</u> b) Handoff c) Reuse Distance d) none

38. ……defined as closest distance between the centers of two cells using the same frequency

a) Frequency Reuse b) Handoff **c) <u>Reuse Distance</u>** d) none

39. ……. considered as finding the cell where the receiver is currently located

a) Authentication **b) <u>Location manage</u>** c) Resource manage d) handoff

40. ……. considered as validating information of subscriber originating the call

a) <u>Authentication</u> b) Location manage c) Resource manage d) handoff