

# WSAN- Quiz-II

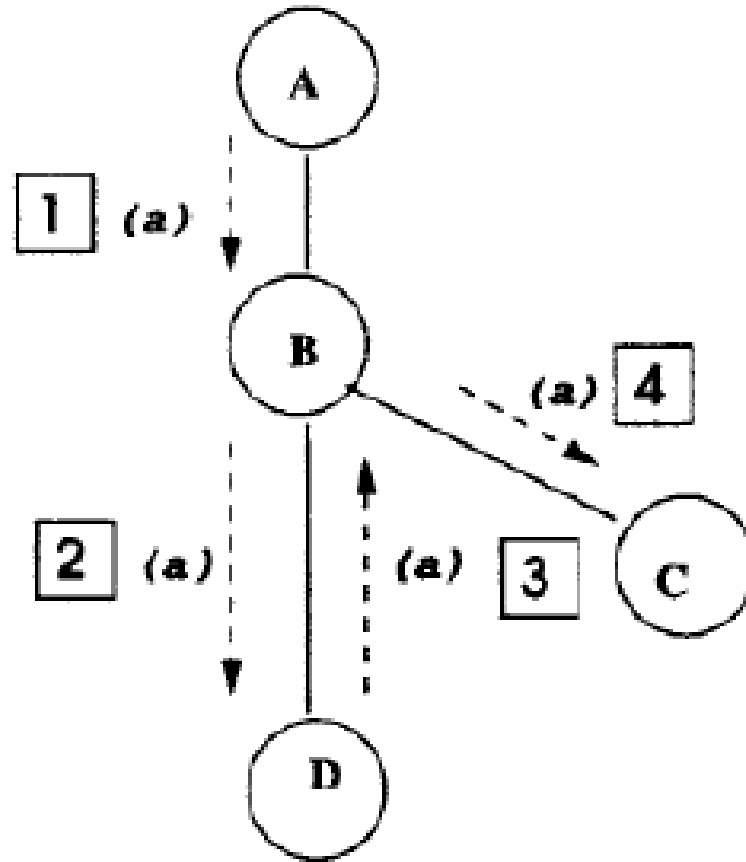
Date:-15<sup>th</sup> Oct'12

- Write name & roll number on the top of the sheet.
- Slides will automatically change after the allotted time. Time is mentioned on the top right corner. Please maintain pace with the slides.
- Write only keywords for answers involving what & which
- In multiple choice questions write the full answer on the answer sheet and just not option A or option B etc.

**15 Seconds**

1. Which command is used to identify a path of USB where a mote is connected ?

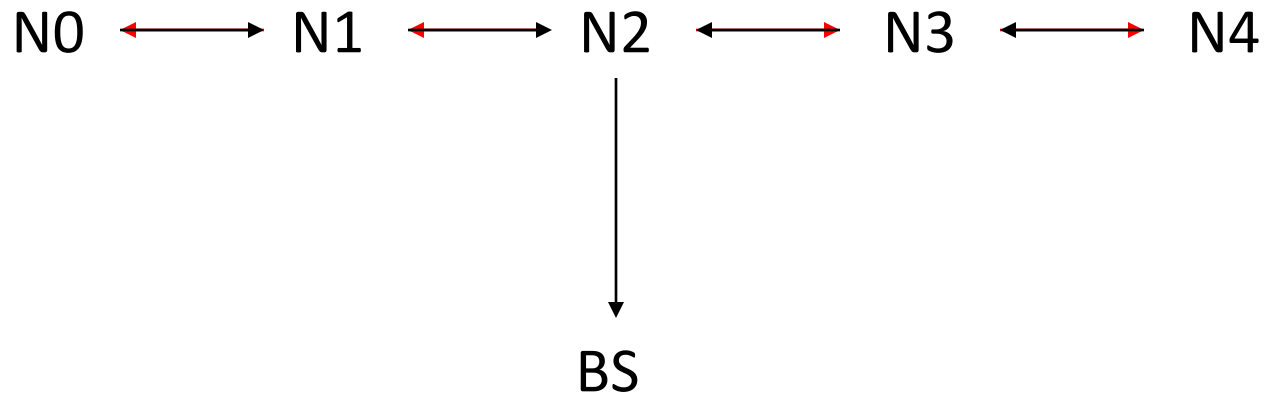
15 Seconds



2. Name the routing technique used in above network.

3. Name the two phases of LEACH routing protocol.

# 4. Name the following protocol



→ Token

→ Data

5. Which of the following protocol is proactive ?

- LEACH
- DD
- GAF
- TEEN
- SPIN

15 Seconds

6.If a query is to be floated in a specific region of a network. Which protocol will be suitable for this situation

- A. LEACH
- B. Directed Diffusion
- C. GEAR
- D. GAF
- E. TEEN
- F. GBR

15 Seconds

7. Write a command to burn a code in a mote.



8. “New packets are not forwarded to the nodes which are already engaged in forwarding packets”. Which of the following schemes can be used in this situation.

- A. Stream Based Scheme
- B. Energy Based Scheme
- C. Stochastic Scheme
- D. Greedy Scheme

9. Which of the following is not a location based protocol ?

- A. GEAR
- B. GAF
- C. APTEEN
- D. MECN

10. Location of a node can be determined using :

- A. Global Positioning System
- B. Beacons
- C. Ultrasonic Systems using trilateration
- D. Routing Table

11. What is the advantage of Flooding ?

## 12. Location based protocols assume that

- A. Each node knows its location in the network.
- B. Source knows the location of Base Station
- C. Source node knows only its neighbors location
- D. Only Location of ROI is known

13. Which of following protocol is energy-aware location based ?

- A. Geographic and Energy Aware Routing
- B. Geographic Adaptive Fidelity
- C. Minimum Energy Communication Network
- D. LEACH

15 Seconds

14. Expand APTEEN ?

15. Give a formula to select a cluster head in LEACH protocol.



16. Which of following technique is used in a situation “A node forwards a packet which reaches a dead end i.e. where there is no neighbor closer in direction of destination” .

- A. Most Forwarding progress within Radius
- B. Compass Routing
- C. Greedy Forwarding
- D. Face routing

17. Which of the following is not a hierarchical protocol

- SPIN
- LEACH
- DD
- APTEEN
- PEGASIS
- MECN

18. In LEACH protocol the cluster head forwards

- A. No collision schedule
- B. TDMA schedule
- C. Sleeping mode Schedule
- D. Active mode Schedule
- E. Radio turning off Schedule

19. In which protocol Nodes change state from sleeping to active for load balancing

- GEAR
- TEEN
- PEGASIS
- GAF

20. A node must report to a base station if a sensed value is crossing a specific reading. Which protocol will be best suitable in the above situation ?

A.LEACH

B.SPIN

C.GEAR

D.TEEN

E.GAF

21. Name the states of state transition of a node in GAF.

22. Expand the term **LEACH** protocol

23. Which routing protocol calculates cost to forward a packet to the next node.

- A. APTEEN
- B. MCFA
- C. PEGASIS
- D. GEAR
- E. Directed Diffusion



15 Seconds

## 24. Expand PEGASIS?

25. If the available energy of the node decreases below of a certain level, the node increases its height to prevent other nodes sending data to it.

- A. Stream Based Scheme
- B. Energy Based Scheme
- C. Stochastic Scheme
- D. Greedy Scheme

26. Which of the following protocol is reactive ?

A.LEACH

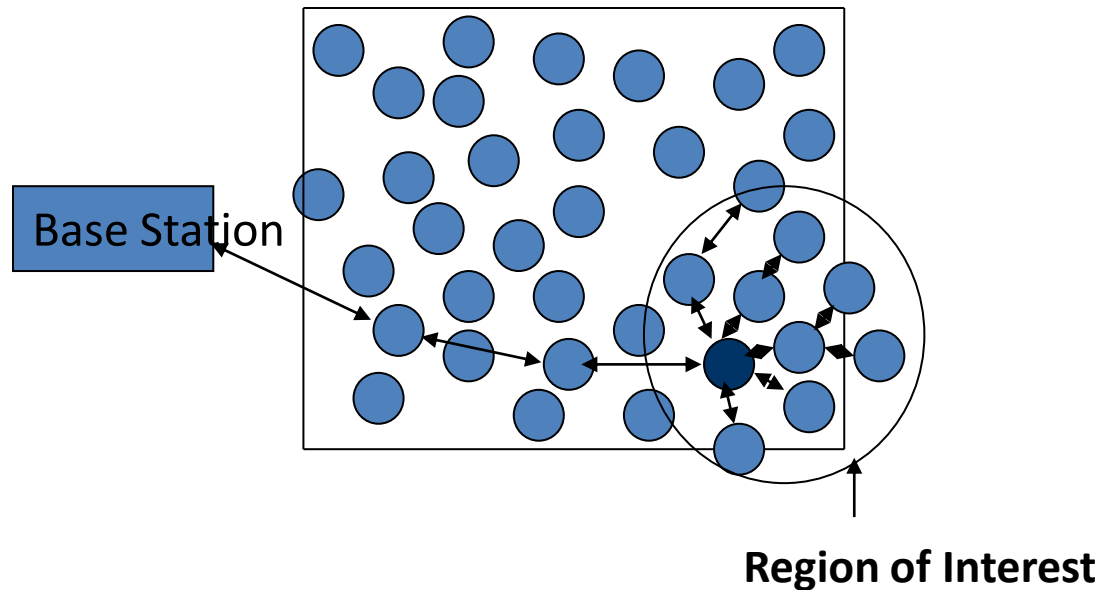
B.RUMOR

C.GAF

D.TEEN

E.SPIN

15 Seconds



27. Which is this protocol ?

A. LEACH

B. RUMOR

C. TEEN

D. GEAR

28. Is the absolute value of the attribute beyond which, the node sensing this value must switch on its transmitter and report to its cluster head.

- Energy cost
- Battery Threshold
- Hard Threshold
- Soft Threshold

29. List the drawbacks of TEEN.

30. Which is a protocol in which the initial cost is taken as infinity.

A.SPIN

B.LEACH

C.MCFA

D.APTEEN

E.TEEN

F.PEGASIS

G.RUMOR

31. List the categories of routing methods based on network structure ?



32. A node sends a data to all its neighbours and its neighbours sends a data to all their neighbours. This process is repeated till the destination arrives. Which is this method ?

A. RUMOR

B. GOSSIPING

C. FLOODING

D. GREEDY FORWARDING

33. This protocol uses the idea of distributing only the data that other nodes do not have, assuming the nodes in close proximity have similar data.

A.RUMOR

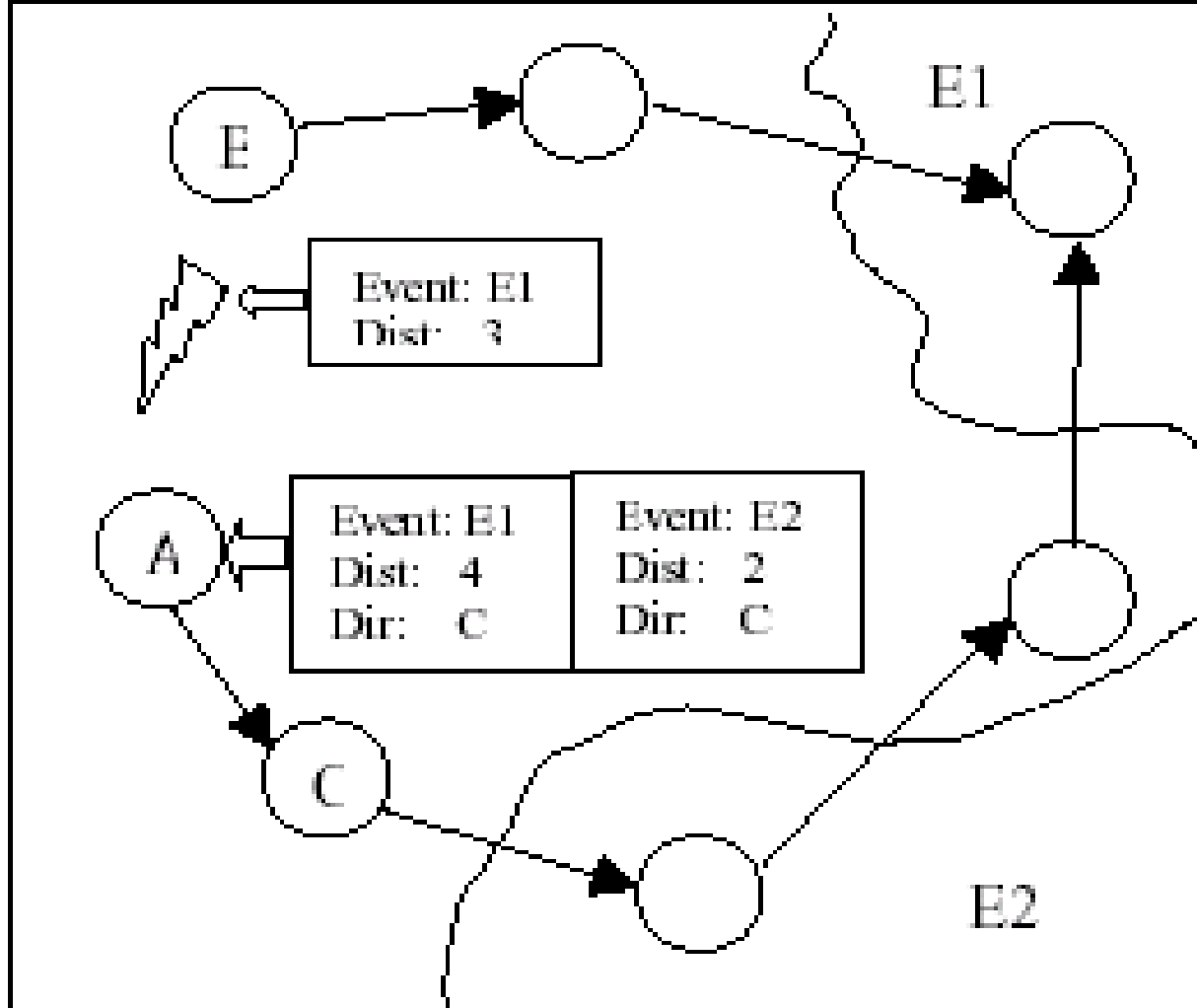
B.MCFA

C.APTEEN

D.SPIN

34. In which protocol node observes that its energy is approaching a low-energy threshold, it adapts by reducing its participation in the protocol.

- SPIN
- TEEN
- APTEEN
- SPIN-2
- LEACH



15 Seconds

35. Which is the above protocol ?

36. In which of the protocols each sensor node stores the entry of interest in cache

A. MCFA

B. APTEEN

C. SPIN

D. DD

E. PEGASIS

37. Which of the following protocol uses a Data Centric Approach

A.RUMOR

B.SPIN

C.LEACH

D.DD

E.GBR

38. For the event driven applications which protocol will be most suitable?

A.DD

B.SPIN

C.RUMOR

D.PEGASIS

E.GEAR

39. Which protocols maintains an event table ?

A.MCFA

B.RUMOR

C.GEAR

D.DD

E.TEEN



40. Which protocol allows a query to transfer on random path ?

A.RUMOR

B.DD

C.APTEEN

D.PEGASIS

E.LEACH

41. Define an Agent ?

42. In which protocol any node may generate a query routed to particular event.

A.GEAR

B.TEEN

C.SPIN

D.RUMOR

43. Which of the following are flat protocols ?

A. COUGAR

B. APTEEN

C. GAF

D. MECN

44.If there are two or more links having same gradient, randomly choose one of them. Which scheme is this ?

- A. Stream Based Scheme
- B. Energy Based Scheme
- C. Stochastic Scheme
- D. Greedy Scheme

45. In DD protocol for interest propagation which of the following design can be used ?

A. Flooding

B. Directional Flooding based on location

C. Directional propagation based on previously cached data

46. which type of routing protocol is MCFA ?

A.Flat

B.Hierarchical

C.Location Based

47. What is a difference between address centric and Data centric protocols



48. Which of the protocol which discovers arbitrary paths instead of the shortest path

A.MCFA

B.RUMOR

C.DD

E.GAF

49. In Rumor routing, if a query from a node does not reach a destination then, which of following technique will be employed to reach the destination.

A. Gossiping

B. Flooding

C. Greedy

D. Directional Routing

50. Which of following protocol uses minimum hopping ?

- A.MCFA
- B.GAF
- C.PEGASIS
- D.GBR
- E.SPIN