

T.Y.B. Sc.CS–Sem – VI

Examination Oct 2020

Subject – Wireless sensors and Mobile Communication (USCS601)

Date :

- 1) The Challenges we faced in designing sensor network system and application include
 - a) Limited hardware
 - b) Limited support for networking
 - c) Limited support for software development
 - d) All of above

- 2) Which of the following condition is satisfied for below statement: Challenges and Issue Designing a Sensor Network
 - a) It must be infrastructure-less
 - b) It must be adaptive to frequent topology
 - c) It must be loop free

- 3) What are the most important design aspects of TinyOS?
 - a) Component based system
 - b) Component interact by exchanging asynchronous events
 - c) Components form a program by wiring them together
 - d) All the above

- 4) In a typical sensor network ,each sensor node operates untethered and has a microprocessor and a small amount of memory for signal processing and task scheduling.
 - a) True
 - b) False

- 5) Which of the following issues we face in designing a Wireless Sensor Network?
 - a) Maintenance and setup of the network should be autonomous.
 - b) Limited resources like memory, computation,power.
 - c) Sensor not should be able to adapt change in connectivity
 - d) All of the above

6) In _____ , each mobile node is an independent node, which act as a host and a router.

a) Wireless Sensor Network

b) Mobile Ad-hoc Network

c) Both a and b

7) Multihop network operates on _____ principle.

a) store packet

b) forward packet

c) store and forward packet

d) receive and update packet

8) Which of the following is a data gathering protocol which is based on the assumption that all nodes know the location of each other node?

a) Low Energy Adaptive Clustering Hierarchy

b) Power Efficient Gathering for Sensor Information System

c) Sensor Protocols for Information via Negotiation.

d) Flooding and Gossiping

9) Which of the following specifies a set of media access control (MAC) and physical layer specifications for implementing WLANs?

a) IEEE 802.16

b) IEEE 802.3

c) IEEE 802.11

d) IEEE 802.15

10) Which are the features present in IPv4 but not in IPv6?

- a) Fragmentation
- b) Header checksum
- c) a and b
- d) none

11) Match the following

List 1

List 2

A) Transceivers

1) It has ability to support mobile participants.

B) Controller

2) it collect data from other sensors, processes data and it decides where and when to send the processed data.

C) Mobility

3) it is low cost supports all circuitry, such as modulation amplifications demodulation, filters and mixers required for transmission and reception of data.

D) Scalability

4) It is the capability of the network to maintain characteristics with respect to the size

Choose the correct option from those given below.

- a) A-3; B-4; C-1; D-2
- b) A-4; B-1; C-3; D-2
- c) A-2; B-4; C-1; D-3
- d) A-4; B-3; C-2 ;D-1

12) A packet in Transmission Control Protocol (TCP) is called a _____

- a) Transmittable slots
- b) Packet
- c) Segment
- d) None of the above

13) Which protocol assigns an IP address to the client connected to the internet?

- a.) DHCP
- b.) IP
- c.) RPC
- d.) RSVP

14) _____ is a process of simultaneously transmitting two or more individual signal over a signal over a single communication channel'

- a) Multiplexing
- b) Duplexing
- c) Overpassing
- d) Sending

15) Wireless Sensor Network can be designed with_____ topology

- a)Star
- b)Mesh
- c)Tree
- d)All Of The Above

16) Which of the following statements is/are true?

P : Digital European Cordless Telephony (DECT) is well suited to both domestic and business use.

Q : DECT is dynamic channel allocation and digital voice coding provide a voice quality comparable to a landline

R : The DECT system is based on TCP principles.

Select the correct answer from the options given below:

- a) P and Q only
- b) P and R only
- c) Q and R only
- d) All of P, Q and R

17)Which of the following does not come under the teleservices of GSM?

- a) Standard mobile telephony
- b) Mobile originated traffic
- c) Base originated traffic
- d) Packet switched traffic

18) A wireless network interface can work in

- a) Infrastructure mode
- b) Ad hoc mode
- c) Both a and b
- d) None of the above

19) A Geo satellite is at the _____ orbit and revolves in phase with Earth

- a)Equatorial
- b)Polar
- c)inclined
- d)Non-inclined

20)GPS satellite are _____ satellites

- a)GEO
- b)MEO
- c)LEO
- d)None of these

21)_____ satellite will provide universal broadband internet access

- a)GPS
- b)Iridium
- c)Teledesic
- d)none of these

22) Iridium satellites are _____ satellites

- a)GEO
- b)MEO
- c)LEO
- d)None of these

23) Low-Earth-orbit(LEO) satellite have _____ orbit

- a)Equatorial
- b)Polar
- c)inclined
- d)Non-inclined

24) LEO satellites are normally below an altitude of _____ km

a)1000

b)2000

c)3000

d)4000

25) There are (is) _____ orbit(s) for a GEO satellite

a)one

b)two

c)three

d)many