



Introduction to

Internet of Things

Assignment-Week 4

TYPE OF QUESTION: MCQ/MSQ

Number of questions: 15

Total marks: 15 X 1 = 15

QUESTION 1:

State whether the following statement is true or false.

Statement: In “AID”, a set of sensor nodes are deployed over an agricultural field.

- a. True
- b. False

Correct Answer: a. True

Detailed Solution: In “AID”, a set of sensor nodes are deployed over a agricultural field

See lecture 16 (Sensor Networks-III) @ 13:16

QUESTION 2:

State True or False.

Statement: Ultrasonic sensor senses the distance at which an object is located.

- a. True
- b. False

Correct Answer: a. True

Detailed Solution: Ultrasonic sensor senses the distance at which an object is located.

See lecture 16 (Sensor Networks-III) @ 13:18



QUESTION 3:

State true or false.

In case of static sensors, where to deploy and/or activate sensors in WSN is a coverage problem.

- a. True
- b. False

Correct Answer: a. True

Detailed Solution: In case of static sensors, where to deploy and/or activate sensors in WSN is a coverage problem.

See lecture 17 (Sensor Networks-IV) @ 07:11

QUESTION 4:

State whether the following statement is true or false.

Statement: Objective of coverage in WSN is to use maximum number of sensors and minimize network lifetime.

- a. True
- b. False

Correct Answer: b. False

Detailed Solution: The objective of coverage in WSN is to use minimum number of sensors and maximize the network lifetime.

See lecture 17 (Sensor Networks-IV) @ 08:47

QUESTION 5:

State whether the following statement is true or false.

Statement: “A crossing is covered if it is in the interior of at least one node’s coverage disk.”



a. True

b. False

Correct Answer: a. True

Detailed Solution: A crossing is covered if it is in the interior of at least one node's coverage disk.

See lecture 17 (Sensor Networks-IV) @ 18:58

QUESTION 6:

State which of the following is/are correct for stationary wireless sensor networks.

- a. Topology cannot be changed automatically.
- b. Node failure may result in partition of networks.
- c. Both (a) and (b)
- d. None of these

Correct Answer: c. Both (a) and (b)

Detailed Solution: Topology cannot be changed automatically. And Node failure may result in partition of networks. Are correct.

See lecture 18 (Sensor Networks-V) @ 00:43

QUESTION 7:

Most problems in static WSN can be classified as -

- a. No coverage
- b. More coverage
- c. Both (a) and (b)
- d. None of these

Correct Answer: d. None of these

Detailed Solution: Most problems in static WSN can be classified as -

- a. Area coverage
- b. Point coverage
- c. Barrier coverage



See lecture 18 (Sensor Networks-V) @ 11:30

QUESTION 8:

Which of the following is/are correct with respect UAV networks?

- a. Multi-tasking
- b. Large coverage area
- c. Both (a) and (b)
- d. None of these

Correct Answer: c. Both (a) and (b)

Detailed Solution: Multi-tasking and Large coverage area are correct.

See lecture 19 (Sensor Networks-V) @ 05:19

QUESTION 9:

State True or False.

Statement: UAV networks are scalable.

- a. True
- b. False

Correct Answer: a. True

Detailed Solution: UAV networks are scalable.

See lecture 19 (UAV Networks-V) @ 09:00

QUESTION 10:

In Mobile WSN, the Data Mules

- a. Collect the data from sensor nodes
- b. Goes to the sink and delivers the collected data
- c. Both (a) and (b)
- d. Neither (a) nor (b)

Correct Answer: c. Both (a) and (b)



Detailed Solution: In Mobile WSN, the Data Mules

- a. Collect the data from sensor nodes
- b. Goes to the sink and delivers the collected data

See lecture 18 (Sensor Networks-V) @ 07:15

QUESTION 11:

The full form of AUV is -

- a. Antenna Used Vehicle
- b. Autonomous Underwater Vehicle
- c. Both (a) and (b)
- d. Neither (a) nor (b)

Correct Answer: b. Autonomous Underwater Vehicle (AUV)

Detailed Solution: Autonomous Underwater Vehicle (AUV)

See lecture 18 (Sensor Networks-V) @ 08:35

QUESTION 12:

Humans carry their devices and move around. Sensors embedded within the devices record readings. Sensory readings are then transmitted for processing.

This paradigm of sensing is known as –

- a. Machine Centric Sensing
- b. Device Centric Sensing
- c. Human Centric Sensing
- d. None of these

Correct Answer: c. Human Centric Sensing

Detailed Solution: Humans carry their devices and move around. Sensors embedded within the devices record readings. Sensory readings are then transmitted for processing. This paradigm of sensing is known as Human Centric Sensing.

See lecture 18 (Sensor Networks-V) @ 11:37



QUESTION 13:

State True or False.

Energy of Devices and Participant selection are not two major problems in Human Centric Sensing.

- a. True
- b. False**

Correct Answer: b. False

Detailed Solution: Energy of Devices and Participant selection are not two major problems in Human Centric Sensing.

See lecture 18 (Sensor Networks-V) @ 12:45

QUESTION 14:

Which of the following network topologies is used in UAV networks?

- a. Bus
- b. Star**
- c. Both (a) and (b)
- d. Neither (a) nor (b)

Correct Answer: b. Star

Detailed Solution: UAV networks use the mesh and star network topologies.

See lecture 19 (UAV Networks) @ 02:43

QUESTION 15:

State true or false.

The M2M Application Platform provides integrated services based on device collected data-sets.

- a. True**



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b. False

Correct Answer: a. True

Detailed Solution: The M2M Application Platform provides integrated services based on device collected data-sets.

See lecture 20 (Machine to Machine Communication) @ 18:00

*******END*******