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: Coverage in WSN is defined as the area-of-interest is covered satisfactorily.

   a. True
   b. False

Correct Answer: a. True

Detailed Solution: Coverage in WSN is defined as the area-of-interest is covered satisfactorily.

See lecture 17 (Sensor Networks-IV) @ 01:44

QUESTION 2:

If transmission range >= 2* sensing range,

   a. Coverage implies greater coverage
   b. Coverage implies connectivity
   c. Both (a) and (b)
   d. None of these

Correct Answer: b. Coverage implies connectivity

Detailed Solution: If transmission range >= 2* sensing range, coverage implies connectivity.

See lecture 17 (Sensor Networks-IV) @ 04:14

QUESTION 3:

The two types of reporting in WSN are -

   a. Event driven and machine driven
   b. Event driven and weather driven

c. Event driven and on demand
d. None of these

Correct Answer: c. Event driven and on demand

Detailed Solution: The two types of reporting in WSN are Event driven and on demand

See lecture 17 (Sensor Networks-IV) @ 08:09

QUESTION 4:

The objective of coverage in WSN is to use a _____ number of sensors and

_____ the network lifetime.

   a. minimum, minimize

   b. minimum, maximize

   c. maximum, minimize,

   d. maximum, maximize

Correct Answer: b. minimum, maximize

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 true or false.

The disadvantages of stationary Wireless Sensor Networks are -

Statement-I: Node failure may result in partition of networks.

Statement-II: Topology cannot change automatically.

   a. Statement-I True, Statement-II False
   b. Both Statements are False
   c. Both Statements are True
   d. None of these

Correct Answer: c. Both Statements are True

Detailed Solution: The disadvantages of stationary Wireless Sensor Networks are –

   a. Node failure may result in partition of networks.

b. Topology cannot change automatically.

See lecture 18 (Sensor Networks-V) @ 1:11

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QUESTION 6:

A _____ in MWSN moves in order to collect data from sensor nodes and

goes to the sink and delivers the collected data from different sensor nodes.

   a. Drop
   b. Molecule
   c. Mule
   d. None of these

Correct Answer: c. Mule

Detailed Solution: A mule in MWSN moves in order to collect data from sensor nodes

and goes to the sink and delivers the collected data from different sensor nodes.

See lecture 18 (Sensor Networks-V) @ 07:12

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QUESTION 7:

_____ allows distributed sensing carried by humans and the goal is not just

to collect data but to allow the common people to assess and share the knowledge.
   a. Voluntary sensing
   b. Compressive sensing
   c. Dynamic sensing
   d. Participatory sensing

Correct Answer: d. Participatory sensing

Detailed Solution: Participatory sensing allows distributed sensing carried by humans and
the goal is not just to collect data but to allow the common people to assess and share the
knowledge.

See lecture 18 (Sensor Networks-V) @ 13:01

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QUESTION 8:

Which of the following is/are NOT feature/features of UAV networks?
   a. Mesh or star networks
   b. Multi-tasking
   c. Large coverage area

d. None of these

Correct Answer: d. None of these

Detailed Solution: The following are the features of UAV networks -

    a. Mesh or star networks
    b. Multi-tasking
    c. Large coverage area

See lecture 19 (UAV Networks) @ 02:43

QUESTION 9:

Which of the following is NOT a UAV network constraint?

    a. Frequent link breakages
    b. Prone to malfunction
    c. Very Complex
    d. None of these

Correct Answer: d. None of these

Detailed Solution: The following are UAV network constraints -

    a. Frequent link breakages
    b. Prone to malfunction
    c. Very Complex

See lecture 19 (UAV Networks) @ 09:32

QUESTION 10:

In _____ configuration, UAVs form multiple star topology. One node

from each group connects to the ground station.

    a. Multi-star
    b. Ring
    c. Both (a) and (b)
    d. None of these

Correct Answer: a. Multi-star

Detailed Solution: In multi-star configuration, UAVs form multiple star topology. One node from each group connects to the ground station.

See lecture 19 (UAV Networks) @ 12:03

QUESTION 11:

The full form of FANET is?

a. Flying Ad Hoc Network
b. Fast Ad Hoc Network
c. Fidelity Ad Hoc Network
d. None of these

Correct Answer: a. Flying Ad Hoc Network

Detailed Solution: The full form of FANET is Flying Ad Hoc Network.

See lecture 19 (UAV Networks) @ 14:11

QUESTION 12:

Low-end sensor nodes are -
a. Whose deployment has high density in order to increase network lifetime and survivability.
b. Who perform basic functions such as data aggregation, auto configuration, and power saving.
c. Both (a) and (b)
d. None of these

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

Detailed Solution: Low-end sensor nodes are -
a. Whose deployment has high density in order to increase network lifetime and survivability.
b. Who perform basic functions such as data aggregation, auto configuration, and power saving.

See lecture 20 (Machine to Machine Communication) @ 10:46

QUESTION 13:

Which of the following are the components of the M2M ecosystem?

a. Trees
b. Ocean
c. Device Providers
d. Non-service users

Correct Answer: c. Device Providers

Detailed Solution: The components of the M2M ecosystem are as follows –

    a. Device Providers
    b. Internet Service Providers (ISPs)
    c. Platform Providers
    d. Service Providers
    e. Service Users

See lecture 20 (Machine to Machine Communication) @ 13:00

QUESTION 14:

State whether the following statement is true or false

Statement: The M2M Device Platform enables access to objects connected to the Internet anywhere any time.

    a. True
    b. False

Correct Answer: a. True

Detailed Solution: The M2M Device Platform enables access to objects connected to the Internet anywhere any time.

See lecture 20 (Machine to Machine Communication) @ 16:47

QUESTION 15:

State whether the following statement is true or false

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

    a. True
    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) @ 17:53

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