



# Unit 14 - Week 12

Register for  
Certification exam

## Course outline

### How to access the portal

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

● Lecture 56: Data Handling and Analytics- II

● Lecture 57: Case Study: Agriculture

● Lecture 58: Case Study: Healthcare

● Lecture 59: Case Study: Activity Monitoring - I

● Lecture 60: Case Study: Activity Monitoring - II

● Week 12 : Lecture Material

● Quiz : Assignment 12

○ Feedback for Week 12

## Assignment 12

The due date for submitting this assignment has passed.

Due on 2019-04-24, 23:59 IST

Assignment submitted on 2019-04-15, 21:54 IST

1) If all the data points are same, statistical dispersion becomes –

1 point

- ☐ a. 1
- ☐ b. 10
- ☐ c. 100
- ☒ d. None

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. None

2) The desirable characteristics of an IoT sensor node are

1 point

- ☐ a. Energy-efficiency
- ☐ b. Distributed sensing
- ☐ c. Low-cost
- ☒ d. All of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of the above

3) Long term trend tracking and preventive care in IoT healthcare is possible due to

1 point

- ☐ a. ability of smart devices to collect data autonomously
- ☐ b. ubiquitous connectivity
- ☐ c. smart algorithms and analytics
- ☒ d. all of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. all of the above

4) Activity monitoring in smart homes:

1 point

- ☐ a. Provides better quality of life
- ☐ b. Provides information accurately in a reliable manner
- ☐ c. Provides continuous monitoring support.
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

5) Network-based activity recognition is:

1 point

- ☐ a. Larger and processing intensive

DOWNLOAD  
VIDEOS

Assignment  
Solution

Text Translation

- ☐ b. Low power consumption
- ☐ c. Dependent on network connection
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

6) Which of these is a feature of qualitative data analytics?

1 point

- ☐ a. Data is not described through numerical values
- ☐ b. Described by some sort of descriptive context such as text
- ☐ c. Data can be gathered by many methods such as interviews, videos and audio recordings, field notes.
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

7) Which is true?

1 point

- ☐ a. The statistical model is defined as the mathematical equation that are formulated in the form of relationships between variables.
- ☐ b. A statistical model illustrates how a set of random variables is related to another set of random variables.
- ☒ c. Both a and b
- ☐ d. None of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

c. Both a and b

8) ANOVA is applied

1 point

- ☐ a. when less than 2 samples/populations are to be compared
- ☒ b. when more than 2 samples/populations are to be compared
- ☐ c. Both a and b
- ☐ d. None of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

b. when more than 2 samples/populations are to be compared

9) Which of the following can be the reasons for packet drop in IoT network?

1 point

- ☐ a. Dense foliage
- ☐ b. High temperature
- ☐ c. Rain
- ☒ d. All of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of the above

10) The types of ANOVA are:

1 point

- ☐ a. 2
- ☒ b. 3
- ☐ c. 4
- ☐ d. 5

Yes, the answer is correct.

Score: 1

Accepted Answers:

b. 3

11) Wearables can be used for:

1 point

- ☐ a. Child-care

- ☐ b. Elderly-care
- ☐ c. Entertainment
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

12) Wearable-based activity monitoring can be used for:

1 point

- ☐ a. Continuous monitoring of activity results in daily observation of human behavior and repetitive patterns their activities.
- ☐ b. Easy integration and fast equipping
- ☐ c. Long term monitoring
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

13) Which of these is true is case of network based activity monitoring?

1 point

- ☐ a. Larger and processing intensive methods can be applied
- ☐ b. Group based analytics possible
- ☒ c. Both a and b
- ☐ d. None of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

c. Both a and b

14) What is the network topology of Ambusens WBAN devices?

1 point

- ☐ a. Bus topology
- ☐ b. Star Topology
- ☐ c. Mesh Topology
- ☒ d. None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

b. Star Topology

15) Which of these sensors can be most cheaply used for basic activity monitoring in wearables?

1 point

- ☒ a. Accelerometer
- ☐ b. Cameras
- ☐ c. LIDARs
- ☐ d. LED

Yes, the answer is correct.

Score: 1

Accepted Answers:

a. Accelerometer

Previous Page

End

A project of



NPTEL

National Programme on  
Technology Enhanced Learning

In association with

**NASSCOM**<sup>®</sup>

Funded by

Government of India  
Ministry of Human Resource Development

Powered by

Google<sup>™</sup>

