



NPTEL Online Certification Courses
Indian Institute of Technology Kharagpur



Introduction to

Internet of Things

Assignment-Week 12

TYPE OF QUESTION: MCQ/MSQ

Number of questions: 15

Total marks: 15 X 1= 15



QUESTION 1:

The two types of data analysis are _____.

- a. **Qualitative and Quantitative**
- b. Repetitive and Quantitative
- c. Repetitive and Qualitative
- d. All of these

Correct Answer: a. Qualitative and Quantitative

Detailed Solution: Qualitative and Quantitative are the two types of data analysis. (Please refer Lecture 56@2:33)

QUESTION 2:

Fill in the blank.

To perform an ANOVA, we must have a _____ response variable and at least one _____ factor.

- a. Discrete, categorical
- b. Continuous, quantitative
- c. Discrete, quantitative
- d. **Continuous, categorical**

Correct Answer: d. Continuous, categorical

Detailed Solution: To perform an ANOVA, we must have a continuous response variable and at least one categorical factor. (Please refer Lecture 56@9:24)



QUESTION 3:

Select the statement(s) that denote the type of ANOVA.

Statement I: One way analysis

Statement II: Two way analysis

Statement III: K-way analysis

a. Statement I

b. Statement II

c. Statements I, II, and III

d. None of these

Correct Answer: c. Statements I, II, and III

Detailed Solution: The types of ANOVA includes One way analysis, Two way analysis and K-way analysis (Please refer Lecture 56@11:57)

QUESTION 4:

What is the type of the data dispersion?

a. Range



- b. Average absolute deviation
- c. Variance
- d. All of these

Correct Answer: d. All of these

Detailed Solution: Range, average absolute deviation and variation are the type of data dispersions. (Please refer Lecture 56@13:43)

QUESTION 5:

The two most relevant sensors directly used in agricultures are _____.

- a. Soil moisture and proximity sensor
- b. Soil moisture and water level sensor
- c. ECG sensor and water level sensor
- d. All of these

Correct Answer: b. Soil moisture and water level sensor

Detailed Solution: Soil moisture and water level sensors are the necessary sensors generally used in agriculture. (Please refer Lecture 57@13:11)

QUESTION 6:

The mathematical equation that is formulated in the form of relationships between variables is known as _____.

- a. Logical model
- b. Relational model
- c. Data dispersion



d. Statistical model

Correct Answer: d. Statistical model

Detailed Solution: The mathematical equation that is formulated in the form of relationships between variables is known as Statistical model (Please refer Lecture 56@7:53)

QUESTION 7:

What are the two types of statistical models?

- a. Qualitative and quantitative
- b. Complete and incomplete
- c. Regression and dispersion
- d. None of these

Correct Answer: b. Complete and incomplete

Detailed Solution: Complete and incomplete are two types of statistical models (Please refer Lecture 56@8:11)

QUESTION 8:

Select the correct order of the component layers present in the IoT healthcare.

- a. Sensing layer, cloud platform layer, aggregated layer, processing layer
- b. Sensing layer, aggregated layer, processing layer, cloud platform layer
- c. Aggregated layer, sensing layer, processing layer, cloud platform layer



- d. Sensing layer, processing layer, aggregated layer, cloud platform layer

Correct Answer: b. Sensing layer, aggregated layer, processing layer, cloud platform layer

Detailed Solution: The sensing layer senses data and transmit it o the aggregation layer where the data are aggregated. The aggregated layer further transfers the data to the processing layer the data are processed and final sent to the cloud platform. (Please refer Lecture 58@8:25)

QUESTION 9:

Wireless IoT driven solutions for remote healthcare facility provisioning brings healthcare to patients than bringing patients to healthcare.

a. True

b. False

Correct Answer: a. True

Detailed Solution: In IoT healthcare, wireless IoT driven solutions brings healthcare to patients than bringing patients to healthcare. (Please refer Lecture 58@11:40)

QUESTION 10:

Which of the following handheld devices are used for activity monitoring?

a. EEG and GPS

b. Accelerometer and EEG

c. Accelerometer and GPS

d. All of these

Correct Answer: c. Accelerometer and GPS

Detailed Solution: High end smartphones are likely to have accelerometer, compass, and gyroscope. (Please refer Lecture 59@15:29)



QUESTION 11:

Which of the following are components of IoT?

- a. Sensing layer
- b. Aggregated layer
- c. Processing layer

d. All of these

Correct Answer: d. All of these

Detailed Solution: Sensing layer, Aggregated layer, Processing layer and cloud platform are components of IoT. (Please refer Lecture 58@8:17)

QUESTION 12:

By performing continuous monitoring of a person's activity, it is not possible to observe his/her behavior or to identify any repetitive pattern in his/her day-to-day activity.

- a. True
- b. False**

Correct Answer: b. False

Detailed Solution: Continuous monitoring of activity results in daily observations of human behavior and repetitive patterns in their activity. (Please refer Lecture 59@14:33)

QUESTION 13:

Deep learning based data analysis cannot be performed on videos



a. True

b. False

Correct Answer: b. False

Detailed Solution: Deep learning based data analysis can be done on sensor data, images and videos. (Please refer Lecture 59@19:34)

QUESTION 14:

Which of the following are the inbuilt sensors that are present in high end smartphones?

a. ECG and EEG

b. Accelerometer, proximity sensor, and EEG

c. Accelerometer, Compass, and Gyroscope

d. Pressure sensor and NPK sensor

Correct Answer: c. Accelerometer, Compass, and Gyroscope

Detailed Solution: High end smartphones are likely to have accelerometer, compass, and gyroscope. (Please refer Lecture 60@2:28)

QUESTION 15:

Fill in the blank. Processing the handheld activity device data with artificial intelligence can be used for _____.

a. Fall detection

b. Heart rate detection



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- c. Vehicle detection
- d. All of these

Correct Answer: a. Fall detection

Detailed Solution: Processing the handheld activity device data with artificial intelligence can be used for detecting sudden fall of a person. (Please refer Lecture 60@11:56)

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