



B.E/B.TECH DEGREE EXAMINATIONS: NOV/DEC 2022

(Regulation 2018)

Fifth Semester

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

UI8CSR5203: IoT Analytics

COURSE OUTCOMES

CO1: Realize the need of Data analytics, types of data generated by IOT devices and data analytics tools.

CO2: Determine the appropriate data pre-processing and analysis strategy for IoT Data analytics.

CO3: Discover the benefits of IoT core services and create IoT resources.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

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|---|-----|-------------------|
| 1. List the types of data generated by IoT. | CO1 | [K ₁] |
| 2. Differentiate Data analysis and data analytics. | CO1 | [K ₂] |
| 3. Mention the tools & platforms used for IoT. | CO1 | [K ₁] |
| 4. Describe the use of numpy in Data Analytics. | CO2 | [K ₂] |
| 5. Define Data Visualization. | CO2 | [K ₁] |
| 6. How does the missing data processed in data analytics? | CO2 | [K ₁] |
| 7. What is data imputation? | CO3 | [K ₁] |
| 8. Summarize the uses of statistical analysis. | CO3 | [K ₂] |
| 9. Explain Model selection. | CO3 | [K ₂] |
| 10. Identify the role of AWS in IoT. | CO3 | [K ₁] |

Answer any FIVE Questions:-

PART B (5 x 16 = 80 Marks)

(Answer not more than 400 words)

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|---|---|-----|-------------------|
| 11. a) Explain classification with respect to IoT Analytics. | 8 | CO1 | [K ₃] |
| b) List the need of Data Analytics in IOT based real time applications. | 8 | CO1 | [K ₄] |
| 12. a) Explore various data plotting schemes available for visualization. | 8 | CO1 | [K ₃] |
| b) Classify the types of time series data. | 8 | CO1 | [K ₃] |

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|-----|----|---|---|-----|------|
| 13. | a) | Explain the steps involved in the process of monitor and collect data from IoT sensors. | 8 | CO2 | [K4] |
| | b) | Examine role of outlier detection in prediction. | 8 | CO2 | [K4] |
| 14. | a) | List the types of regression. | 8 | CO2 | [K4] |
| | b) | Compare linear and multiple regression. | 8 | CO2 | [K4] |
| 15. | a) | Explain device management in IoT. | 8 | CO3 | [K3] |
| | b) | Analyze the role of device registry. | 8 | CO3 | [K4] |
| 16. | a) | Analyze the role of AWS in IoT. | 8 | CO3 | [K3] |
| | b) | Explain device gateway. | 8 | CO3 | [K3] |
