

**Instructions to the Students:**

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

	(Level/CO)	Marks
<b>Q. 1 Solve Any Two of the following.</b>		<b>12</b>
A) Discuss the process of collecting, preprocessing, and aggregating data from different IT systems in AIOps.	Remember/C O1	6
B) How might AIOps be utilized to improve incident management in a large-scale IT infrastructure?	Understand/ CO1	6
C) Enumerate and explain at least three use cases of AIOps in IT operations management.	Understand/ CO1	6
<b>Q.2 Solve Any Two of the following.</b>		<b>12</b>
A) What is exploratory data analysis (EDA), and how is it utilized in the context of AIOps?	Understand /CO2	6
B) Discuss the importance of data visualization techniques in AIOps data analysis.	Understand/ CO2	6
C) Differentiate between supervised and unsupervised machine learning approaches in the context of AIOps. Give examples of each.	Understand/C O2	6
<b>Q. 3 Solve Any Two of the following.</b>		<b>12</b>
A) Explain the importance of hands-on experience with AIOps tools for IT professionals.	Understand/ CO3	6
B) Discuss the challenges associated with building AIOps pipelines and how they can be overcome.	Understand/ CO3	6
C) How does the implementation of AIOps pipelines streamline IT operations management processes.	Understand/ CO3	6
<b>Q.4 Solve Any Two of the following.</b>		<b>12</b>
A) What role does automation play in the CI/CD pipeline, and how does it enhance the development process?	Understand/ CO4	6

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| <b>B)</b> Discuss the concept of staging within a CI/CD pipeline and its significance in the deployment process.   | Understand/<br>CO4 | 6 |
| <b>C)</b> Demonstrate the implementation of blue-green deployment using a CI/CD tool of your choice, highlighting the steps involved and the benefits of this deployment strategy. | Understand/<br>CO4 | 6 |

**Q. 5 Solve Any Two of the following.**

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| <b>A)</b> Describe best practices for setting up AIOps pipelines to ensure efficient incident detection and response.                                    | Understand/<br>CO5 | 6 |
| <b>B)</b> Discuss the role of automation in addressing scalability challenges in AIOps implementation.   | Understand/<br>CO5 | 6 |
| <b>C)</b> Explain the importance of data security in AIOps implementation and identify potential security risks associated with AI-driven IT operations. | Understand/<br>CO5 | 6 |

**\*\*\* End \*\*\***