ABES Engineering College, Ghaziabad Department of Computer Science

Lecture Plan

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Program** | **Sem** | **Course Name** | **Course Code** | **Periods**  **(University)** | | | **Evaluation Scheme** | | | | **Course Total** | **Credit** |
| **L** | **T** | **P** | **Sessional Marks** | | | **UE** |
| **CT** | **TA** | **Total** |
| B.Tech | 4 | Object Oriented Programming with Java Lab | BCS-452 | 0 | 0 | 2 |  | 50 | 50 | 50 | 100 | 1 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Periods**  **(Actual)** | | | **Name of Faculty** | **Vertical/Domain Head** | **Date of**  **Commencement** | **Total lectures planned** | **Date of**  **Conclusion** |
| **L** | **T** | **P** |
| 0 | 0 | 4 | Ms.Lopamudra Mohanty/ Ms. Anshul Khanna/ Mr. Abhishek Kesharwani | Mr. Abhishek Kesharwani | 1 April 2024 | 26 | 5th July 2024 |

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| --- | --- | --- | --- |
| **L-T**  **Schedule** | **Name of Practical** | **KL** | **Assign/ Quiz/CT** |
| 1 | **Creating simple java programs using command line arguments** | K2,K3 | ST-1 Quiz after 5th Practical  ST-2 Quiz |
| 2 | **Use Java compiler and eclipse platform to write and execute java program** | K2,K3 |
| 3 | **Understand OOP concepts and basics of Java programming** | K2,K3 |
| 4 | **Create Java programs using inheritance and polymorphism** | K2,K3 |
| 5 | **Implement error-handling techniques using exception handling and multithreading.** | K2,K3 |
| 6 | ST-1 |  |
| 7 | **Create java program with the use of java packages** | K2,K3 |
| 8 | **Construct java program using Java I/O package** | K2,K3 |
| 9 | **Create industry-oriented application using Spring Framework.** | K2,K3 |
| 10 | **Test RESTful web services using Spring Boot.** | K2,K3 |
| 11 | **Test Frontend web application with Spring Boot** | K2,K3 |
| 12 | **CRUD Operations using REST API. (Array List/Map)** | K2,K3 |
| 13 | **CRUD Operations using H2 Database.** | K2,K3 |
| 14 | ST-2 |  |
|  |  |  |

*KL- Bloom’s Knowledge Level (K1, K2, K3, K4, K5, K6)*

*K1 – Remember K2 – Understand K3 – Apply K4 – Analyze K5 – Evaluate K6 – Create* **Text Books:**

**Text Books:**

1. **Herbert Schildt, "Java The complete reference", McGraw Hill Education**
2. **Craig Walls, “Spring Boot in Action” Manning Publication**
3. **Steven Holzner, “Java Black Book”, Dreamtech.**
4. **Balagurusamy E, “Programming in Java”, McGraw Hill**

**Reference Books:**

**Web references:**

https://www.youtube.com/watch?v=YpsFT50mths&list=PLd3UqWTnYXOlyAjYLwPflpu3yqH\_vAY8x

https://www.javatpoint.com/java-tutorial

**Signature of Faculty with Date**