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| **B. E. Degree (Autonomous) Sixth Semester End Examination (SEE),** | | | | | | | | | | | | | | | |
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| **JAVA FULL STACK DEVELOPMENT** | | | | | | | | | | | | | | | |
| **(Model Question Paper –I)** | | | | | | | | | | | | | | | |
| **Time: 3 [ Hours ]** | | | | | | | | |  | | | | **[ Maximum Marks: 100]** | | |
|  | | | | | | |  |  | | --- | --- | | **Note** | **Answer ANY ONE from Question No. 1 and 2**  **Answer ANY ONE from Question No. 3 and 4**  **Answer ANY ONE from Question No. 5 and 6**  **Answer ANY ONE from Question No. 7 and 8**  **Answer ANY ONE from Question No. 9 and 10** | | | | | | | | |  | |

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| **Q.NO** | | **Answer Five Full Questions** | **Marks** | **CO’S** | **Bloom’s Level** |
| **1** | **a.** | Explain the evolution of JAVA. List out java buzzwords. | **06 Marks** | **CO1** | **L1,2** |
| **b.** | What is a Java Exception? List out the difference between checked and Unchecked exceptions with a program examples**.** | **06 Marks** | **CO1** | **L1,2** |
| **c.** | Design and implement JAVA cod snippet to create five threads with different priorities. Send two threads of the highest priority to sleep state. Check the aliveness of the threads and mark which is long lasting. | **08 Marks** | **CO1** | **L5** |
| ***Or*** | | | | |  |
| **2** | **a.** | Explain the following with program examples:  i)< = ii) > = iii) >> iv) << v ) >>> | **12 Marks** | **CO1** | **L2** |
| **b.** | List out the best practices for Java Collections Framework? | **08 Marks** | **CO1** | **L1,2** |
|  | | | | | |
| **3** | **a.** | Explain Lambda Expression with a syntax and differentiate between Lambda Expression and over Regular Methods. Write JAVA Lambda Expression program using one parameter. | **10 marks** | **CO2** | **L1,2** |
|  | **b.** | Design and implement a simple JDBC application program. | **10 Marks** | **CO2** | **L5** |
| ***Or*** | | | | |  |
| **4** | **a.** | Explain the following with a program example:  i. Statement ii. PreparedStatement | **10 marks** | **CO2** | **L2** |
|  | **b.** | Define Streams. List out the difference between stream and collections with examples. | **10 Marks** | **CO2** | **L1,2** |
|  | | | | |  |
| **5** | **a.** | Define JPA. Explain the properties of an Entities objects. Design and implement a simple entity program for student class. | **10 Marks** | **CO3** | **L1,5** |
|  | **b.** | Explain One-to-One Entity Relation mapping both in unidirectional and bidirectional way with an example. | **10 Marks** | **CO3** | **L2** |
| ***Or*** | | | | |  |
| **6** | **a.** | Explain the steps for creating the Hibernate application. | **10 Marks** | **CO3** | **L2** |
|  | **b.** | Explain the following with an program example:  i.Entity relationship ii. Querying Entities | **10 Marks** | **CO3** | **L2** |
| **7** | **a.** | Explain Spring web MVC. Design and implement simple spring web MVC framework program to display Helloworld. | **10Marks** | **CO4** | **L1,5** |
|  | **b.** | Define Spring Boot**. Why should we use Spring Boot Framework? List out Spring boot features.** | **06 Marks** | **CO4** | **L1,2** |
|  | **c.** | List out the difference between Spring Boot and Spring MVC. | **04 Marks** | **CO4** | **L1** |
| ***Or*** | | | | | |
| **8** | **a.** | Design and implement simple spring boot program to print “WELCOME TO SPRING BOOT”. | **10 Marks** | **CO4** | **L5** |
|  | **b.** | Explain the following with a program:  i.Spring Container ii. Dependency injection | **10Marks** | **CO4** | **L2** |
| **9** | **a.** | Define Angular JS. Explain features of Angular JS. | **10 Marks** | **CO5** | **L1,2** |
|  | **b.** | Explain the following Angular JS Directives with an example:   1. ng-app 2. ng-init | **10 Marks** | **CO5** | **L1,2** |
| **Or** | | | | |  |
| **10** | **a.** | Explain how to redirect to a particular section of a page using HTML with an example. | **10 Marks** | **CO5** | **L2** |
|  | **b.** | Write a note on Node.js. | **05 Marks** | **CO5** | **L1** |
|  | **c.** | Explain Angular JS Modules. | **05 Marks** | **CO5** | **L2** |