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**KGiSL INSTITUTE OF TECHNOLOGY**

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Internal Exam – I – JUL/2018**

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| **CLASS:** | **:** | **II B.Tech IT** | **MAX MARKS** | **:** | **100** |
| **SEMESTER:** | **:** | **III** | **DURATION** | **:** | **3:00 Hrs** |
| **SUBJECT:** | **:** | **Object Oriented Programming** | **CODE** | **:** | **CS8392** |
|  |  |  | **DATE** | **:** |  |

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| --- | --- | --- |
| **PART – A ( 10 X 2 = 20 Marks )** | | |
| **I** | **ANSWER ALL QUESTIONS** | |
|  | 1. | What is Object Oriented Programming? |
|  | 2. | What is Abstraction? |
|  | 3. | What is encapsulation? |
|  | 4. | Write a java program to compute simple interest for a bank. |
|  | 5. | Define Parameterized Constructor. |
|  | 6. | Give a short note on constants in a class. |
|  | 7. | Write program to store and print odd numbers from 1 to 100 using arrays. |
|  | 8. | What is inheritance? |
|  | 9. | Write a short note on final class and final methods. |
|  | 10. | Define abstract classes. |

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| **PART – B ( 5 X 13 = 65 Marks )** | | | | | |
| **II** | **ANSWER ALL QUESTIONS** | | | | |
|  | 11. | (a) | (i) | Explain about 4 principles of oops. | **7** |
|  |  |  | (ii) | Write a java program that receives an limit from the user and display Fibonacci sequence up to the limit. | **6** |
|  |  |  |  | **( OR )** |  |
|  |  | (b) | (i) | Write a java program that receives basic details of students [Name, RollNo, Three Subject Marks] and computes the following [Total and average] and display the grades [O,A,B,C,D,F] according to average. | **6** |
|  | 12. | (a) | (i) | Describe about constrictor and it’s type with proper examples. | **13** |
|  |  |  |  | **( OR )** |  |
|  |  | (b) | (i) | Describe about what are the data types supported by java with proper examples. | **7** |
|  |  |  | (ii) | Explain about arithmetic, logical, bitwise operators in java. | **6** |
|  |  |  |  |  |  |
|  | 13. | (a) | (i) | Explain with an example for loop and for each loop. | **8** |
|  |  |  | (ii) | Write a program to print prime member of give array using while loop. | **4** |
|  |  |  |  | **( OR )** |  |
|  |  | (b) | (i) | Create an converter application [Distance and Time] using packages. | **7** |
|  |  |  | (ii) | Give a short note on access spcifiers in java. | **6** |
|  |  |  |  |  |  |
|  | 14. | (a) | (i) | Create an application that handles types vehicle with proper inheritance.  [Base: Vehicle Childs: Bicycle, Bike, Car [Economic, Sports Car]]. | **8** |
|  |  |  | (ii) | Demonstrate dynamic binding with a simple example. | **4** |
|  |  |  |  | **( OR )** |  |
|  |  | (b) | (i) | Explain about abstract classes and purpose finally method with an example. | **13** |
|  |  |  |  |  |  |
|  | 15. | (a) | (i) | Explain about final class and final methods with suitable examples. | **13** |
|  |  |  |  | **( OR )** |  |
|  |  | (b) | (i) | Explain in detail about importance of Object Class and its methods. | **13** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **PART – C ( 1 X 15 = 15 Marks )** | | | | | |
| **III** | **ANSWER ALL QUESTIONS** | | | |  |
|  | 16 | (a) |  | Write an interactive [user input based] console calculator that helps to do basic and scientific [sin, cos, tan, log ] operations. | **15** |
|  |  |  |  |  |  |
|  |  | (b) |  | Write a java program that manages the banking operations [Add Account, Delete Account, Credit and Debit Transactions] based on the concepts of inheritance. | **15** |

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| **Signature of Faculty** | **Signature of HOD** |

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| \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* | *System.out.println***(“All the Best”)** | \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* |