Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **16CA2017** | **Duration :** | **3hrs** |
| **Sub. Name :** | **OBJECT ORIENTED ANALYSIS AND DESIGN** | **Max. Marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Discuss in detail the object-oriented analysis and design process with a suitable example. Compare and contrast object oriented analysis and structured design methodologies. | CO1 | 20 |
| **(OR)** | | | | |
| 2. |  | Identify the purpose of object modeling. Explain the types of constructs are used in object modeling. | CO1 | 20 |
|  |  |  |  |  |
| 3. | a. | Explain the Rumbaugh object modeling technique with a neat sketch. | CO2 | 10 |
| b. | Draw the state transition diagram for a bank user application interface. | CO3 | 10 |
| **(OR)** | | | | |
| 4. |  | Define UML. Explain with example the various types of UML diagrams drawn to handle static and dynamic component of the software under development. | CO5 | 20 |
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| 5. |  | Discuss in detail the guidelines for developing effective documentation. | CO2 | 20 |
| **(OR)** | | | | |
| 6. | a. | Explain with examples the elements of a use case diagram. | CO4 | 12 |
| b. | Draw the state diagram for a telephone line. At the start of a call, the telephone line is idle. When the phone is removed from the hook, it emits a dial tone andcan accept the dialing of digits. Upon entry of a valid number, the phone system tries to connect the call and route it to the proper destination. The connection can fail if the number is busy. If the connection is successful the called phone begins ringing. If the called party answers the phone, a conversation can occur.When the called party hangs up the phone disconnects and returns to idle when put on hook again. | CO5 | 8 |
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| 7. |  | Perform a case study on Relationship analysis for the ViaNet bank ATM system. | CO6 | 20 |
| **(OR)** | | | | |
| 8. |  | Analyse how use case and other UML diagrams are used to identify classes ,attributes and methods. | CO2 | 20 |
|  | | **Compulsory**: |  |  |
| 9. |  | Paraphrase the object-oriented design process and design axioms. | CO4 | 20 |