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



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

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| **Code :** | **17CA2017** | **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. | a. | Justify the advantages of the object-oriented analysis and design paradigm over the structure oriented analysis and design paradigm. | CO1 | 10 |
| b. | Compare and contrast the concept of aggregation with the concept of association and generalization. Use suitable diagram to strengthen your answer. | CO2 | 10 |
| **(OR)** | | | | |
| 2. |  | Explain with example the stages in component based development .  Identify how component based development promotes and improves reusability. | CO2 | 20 |
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| 3. | a. | Explain in detail Booch Methodology with a neat sketch. | CO3 | 12 |
| b. | Mention the the importance of sequence diagram. Illustrate it with an example of validating PIN for an ATM. | CO3 | 8 |
| **(OR)** | | | | |
| 4. | a. | Discuss the need for activity diagrams in UML. Explain with examples how it differs from interaction diagrams. | CO3 | 10 |
| b. | Give class diagram for a ticket reservation system. | CO3 | 10 |
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| 5. |  | Describe in detail the noun phrase approach of the ViaNet Bank ATM system for the following cases.   1. Identifying classes by using noun phrase approach. 2. Building a common vocabulary. 3. Reviewing the possible attributes. | CO4 | 20 |
| **(OR)** | | | | |
| 6. |  | Depict and analyse how use-case driven object oriented analysis is used in the unified approach. | CO5 | 20 |
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| 7. |  | Explain in detail the steps to identify associations in object oriented analysis and design. | CO4 | 20 |
| **(OR)** | | | | |
| 8. | a. | Summarize classes, responsibilities and collaborators in object oriented classification. | CO5 | 10 |
| b. | Identify the classes and their behavior through sequence / collaborative modeling for banking system. | CO6 | 10 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Discuss with a neat sketch the phases of object oriented design process. | CO4 | 10 |
| b. | Explain the following OO design.  i) OO Design Axioms ii) Coupling | CO6 | 10 |