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

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**End Semester Examination – Nov/Dec – 2018**

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| **Code :** | **14CS3032** | **Duration :** | **3hrs** |
| **Sub. Name :** | **OBJECT ORIENTED SOFTWARE ENGINEERING** | **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. | Discuss about the activites involved in managing the software development. | | CO1 | 10 |
| b. | Draw a class diagram representing a book defined by the following statement: “A book is composed of a number of parts, which in turn are composed of a number of chapters.Chapters are composed of sections.” Focus only on classes and relationships. | | CO3 | 10 |
| (OR) | | | | | |
| 2. | a. | Consider the process of ordering a pizza over the phone. Draw an activity diagram representing each step of the process, from the moment you pick up the phone to the point where you start eating the pizza. Do not represent any exceptions. Include activities that others need to perform. | | CO3 | 10 |
| b. | Report the planned and unplanned communication events that are available to participants for sharing the information on software project. | | CO1 | 10 |
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| 3. | a. | Analyze that you are responsible to coordinate the development of a system for banking, in which the bank employee responsible for processing credit applications; the manager of the information technology group at the bank, who contracted the system; a freelancer who developed similar systems in the past. Explain the above system design activities using State chart diagram. | | CO3 | 8 |
| b. | Explain the analysis activities from use cases to objects in detail. | | CO3 | 12 |
| (OR) | | | | | |
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| 4. | a. | You are designing the access control policies for a Web-based retail store. Customers access the store via the Web, browse product information, input their address and payment information, and purchase products. Suppliers can add new products, updateproduct information, and receive orders.The store owner sets the retail prices, makes tailored offers to customers based on their purchasing profiles, and provides marketing services. You have to deal with three actors: StoreAdministrator, Supplier, and Customer. Draw a UML deployment diagram representing the hardware/software mapping of this system. | | CO2 | 10 |
| b. | Narrate how to manage the system design in detail. | | CO2 | 5 |
|  | c. | Estimate the developments made in project using object design | | CO2 | 5 |
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| 5. | a. | Why the ‘Reuse’ concept is used in OOSE and explain the reuse concept with objects, inheritance and design patterns. | | CO2 | 10 |
| b. | Explain the following   1. Optimizing the Object Design Model. 2. Mapping Associations to Collections. | | CO2 | 10 |
| (OR) | | | | | |
| 6. | a. | Write in detail about mapping activities and mapping implementation. | | CO3 | 10 |
| b. | Delegation and inheritance in design pattern. | | CO2 | 10 |
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| 7. |  | | Explain the configuration managent in detail. | CO3 | 20 |
| (OR) | | | | | |
| 8. | a. | What are the four major components and four activities used in project management and explain in detail. | | CO1 | 10 |
| b. | Discuss the various transformation principles should be followed by the developer during model transformation in order to avoid the chances of new error. | | CO2 | 10 |
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|  | | **Compulsory**: | |  |  |
| 9. | a. | Explain the Life Cycle Model with suitable UML sequence diagram in detail. | | CO2 | 10 |
| b. | Explain the following   1. Royce’s Methodology 2. Extreme Programming | | CO2 | 10 |