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



**End Semester Examination – Nov/Dec - 2017**

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| **Code :** | **14CS2056** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DESIGN PATTERNS** | **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. | What are the essential elements of design pattern? | CO2 | 2 |
| b. | Consider the following scenario, you are working as TL in a software company, you need to describe a new design pattern which is going to implement in the project to your team member. How will you describe design pattern? | CO1 | 18 |
| (OR) | | | | |
| 2. | a. | How will you select a design pattern? Explain the steps. | CO1 | 10 |
| b. | Give the steps how to use a design pattern. | CO2 | 10 |
|  |  |  |  |
| 3. |  | Explain the design problem in Lexi’s document editor. | CO1 | 20 |
| (OR) | | | | |
| 4. | a. | How will you graphically represent prototype design pattern? | CO2 | 4 |
|  | b. | What is creational pattern? Write in detail about abstract factory. | CO2 | 16 |
|  |  |  |  |  |
| 5. |  | Describe adapter design pattern with respect to intent, motivation, applicability, structure, collaborations and implementation. | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Explain the structure diagram of various Structural design patterns. | CO2 | 20 |
|  |  |  |  |  |
| 7. |  | Describe Bridge pattern with respect to intent, motivation, applicability, structure, collaborations and implementation. | CO2 | 20 |
| (OR) | | | | |
| 8. | a. | Draw the interaction diagram of Command Design Pattern. | CO2 | 2 |
|  | b. | State the applicability of Interpreter pattern. | CO2 | 2 |
|  | c. | What is Behavioral design pattern? Describe strategy pattern with respect to intent, motivation, applicability, collaborations and implementation. | CO2 | 16 |
|  |  |  |  |  |
|  | | **Compulsory:** |  |  |
| 9. | a. | What are the different types of behavioral Design patterns? | CO1,CO2 | 2 |
|  | b. | Give the consequences of iterator design pattern. | CO1,CO2 | 2 |
|  | c. | Give the structure and participants of following design pattern.  i. Command ii. Memento iii. Visitor | CO1,CO2 | 16 |

ALL THE BEST