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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 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. |  | 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 be implemented in the project to your team member. How will you describe design pattern?. | CO1 | 20 |
| (OR) | | | | |
| 2. |  | Assuming that you are working as a software developer in an organization and you are supposed to select a design pattern for the project, Explain the steps to select a design pattern and how to use it | CO1 | 20 |
| 3. |  | Explain the stages in designing a document editor. | CO2 | 20 |
| (OR) | | | | |
| 4. | a. | How will you graphically represent prototype design pattern? | CO2 | 5 |
|  | b. | What is creational pattern? Write in detail about abstract factory. | CO2 | 15 |
| 5. |  | Assuming that you are working as a software developer in an organization and while developing an application you are facing the problem in creating a object at run time i.e. dynamic loading. How will you solve the problem by using Creational design pattern? | CO2 | 20 |
| (OR) | | | | |
| 6. | a. | State the applicability of Flyweight pattern. | CO2 | 2 |
|  | b. | Describe Bridge pattern with respect to intent, motivation, applicability, structure, collaborations and implementation. | CO2 | 18 |
| 7. | a. | Mention participants of visitor pattern. | CO2 | 5 |
|  | b. | Give the structure and participants of following design pattern.  i)Decorator  ii)Composite  iii)Flyweight | CO2 | 15 |
| (OR) | | | | |
| 8. |  | What is Behavioral design pattern? Describe strategy pattern with respect to intent, motivation, applicability, collaborations and implementation. | CO2 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | Explain user design patterns. Elaborate an user interface, look and feel standards. Take a suitable case study to support your explanation. | CO2 | 20 |

ALL THE BEST