Code No: **R41052**　　　　**R10**　　　　| Set No. 1 |

**IV B.Tech I Semester Supplementary Examinations, February/March - 2018**
# UML & DESIGN PATTERNS
**(Computer Science and Engineering)**

**Time: 3 hours**　　　　　　　　　　　　　　　　　　　　**Max. Marks: 75**

**Answer any FIVE Questions**
**All Questions carry equal marks**
*\*\*\*\*\**

| | | | |
|---|---|---|---|
| 1 | a) | Define the importance and principles of modeling? | [8] |
| | b) | What is Object oriented analysis and design? Why it is involved in UML. | [7] |
| | | | |
| 2 | a) | How many different kinds of relationships exist in UML? Explain each with example. | [8] |
| | b) | List out the diagrams with their components in UML? | [7] |
| | | | |
| 3 | a) | Exemplify the interaction diagrams with examples? | [8] |
| | b) | Specify how use case diagram can be drawn? Justify. | [7] |
| | | | |
| 4 | a) | Describe the relationships and things to be used to draw component diagram? | [8] |
| | b) | Illuminate how and when a component diagram can be drawn? Give example. | [7] |
| | | | |
| 5 | a) | In what ways does the design problems can be solved? Explain. | [8] |
| | b) | Is there any special way to select a design pattern? Exemplify. | [7] |
| | | | |
| 6 | a) | Differentiate Abstract factory and factory patterns in detail? | [8] |
| | b) | In what way does Prototype pattern help in solving design issues? | [7] |
| | | | |
| 7 | a) | What are the different types of Structural patterns available? Give brief account on each of them. | [8] |
| | b) | According to what situation a façade pattern takes place? Particularize it. | [7] |
| | | | |
| 8 | a) | Define Chain of responsibility and where it is used? | [8] |
| | b) | What is actually a template metho? Describe briefly. | [7] |