

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**

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- 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]