

R13**Code No: 815BF****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA V Semester Examinations, August - 2017****DESIGN PATTERNS****Time: 3 Hours****Max. Marks: 60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

PART - A**5 × 4 Marks = 20**

- 1.a) What is meant by a design pattern? Discuss the significance. [4]
- b) Write brief notes on abstract factory pattern. [4]
- c) Discuss about implementation of composite pattern. [4]
- d) Discuss the usage of chain of responsibility pattern. [4]
- e) Explain the uses of visitor pattern. [4]

PART - B**5 × 8 Marks = 40**

2. Discribe how the design patterns solve design problems. [8]
OR
3. Discuss about design patterns in small talk MVC. [8]
4. Compare the factory method and prototype design patterns. [8]
OR
5. Explain the structure, implementation and source code for the singleton patterns. [8]
6. Explain the usage of façade pattern with a suitable example. [8]
OR
7. Explain the structure and implementation of decorator and proxy patterns. [8]
8. Compare the usage of Interpreter and Iterator patterns. [8]
OR
9. Write the source code for mediator pattern. And explain its usage with a suitable example. [8]
10. Write the implementation and source code for state and strategy patterns. [8]
11. What we can expect from design patterns? Discuss about the history of design patterns. [8]