Q.P. Code: 16MC842



**7M** 

**5M** 

**7M** 

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## SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)

## MCA III Year I Semester Supplementary Examinations November-2020 DESIGN PATTERNS

Time: 3 hours Max. Marks: 60 (Answer all Five Units  $5 \times 12 = 60$  Marks) **UNIT-I** a Explain How design patterns solve Design Problems. **6M b** Discuss the use of Design Pattern. **6M** OR **a** Define Design Pattern. How it is used in developing the application. **6M b** How to select a Design Pattern? Explain **6M** a Write a short note on document structure. 3 **6M b** Explain The Concept of Embellishing the user interface. **6M** a Discuss about designing the document editor. **6M b** Analyze various problems associated with Lexi's Design **6M UNIT-III a** What are the various issues involved in implementation of factory method? Explain. **5M b** Briefly explain Prototype design pattern **7M** OR a Briefly explain the template of builder design pattern. **5M b** Explain abstract factory of creational patterns. **7M UNIT-IV** a Explain wrapper patterns and its uses with the help of a neat structure. **6M b** Differentiate between structural and creational patterns. **6M a** What is a structural pattern? Explain composite design patterns. **6M b** Briefly explain Decorator Design pattern with an example? **6M** 

\*\*\* END \*\*\*

**UNIT-V** 

OR

**b** List and explain the implementation issues of Observer Design Pattern.

**a** Explain Strategy Pattern in detail.

10 a Briefly describe publish-subscribe Design Pattern.

**b** What is Memento Pattern? Explain its interaction diagram.