# Question Paper Code : 17298

Reg. No. :

M.E. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Elective

. Biometrics and Cyber Security

CP 7022 — SOFTWARE DESIGN

(Common to M.E. Computer Science and Engineering and M.E. Computer Science and Engineering (With Specialization in Networks)

(Regulations 2013)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

1. What are the needs to design software?

2. What is refactoring?

- 3. How OOD and OOP related?
- 4. What are the elements of object model?
- 5. What is a design patterns?

6. How to documenting the reusable solutions?

7. What is service design?

8. What is data flow design?

9. Define interface and interaction.

10. Define walkthroughs.

## PART B — $(5 \times 13 = 65 \text{ marks})$

11. (a) Explain the major phases of software design process. And explain the design guidelines and check lists.

Or

- (b) Explain the term software modeling :
  - (i) Modularity
  - (ii) Hierarchy
  - (iii) Coupling
  - (iv) Cohesion.
- 12. (a) Explain the object oriented analysis. And explain any two UML diagrams with neat sketch.

Or

- (b) Describe in detail about the key abstractions and mechanisms of object model.
- 13. (a) Give short notes of
  - (i) Design context. (6)
  - (ii) Reusable solutions.

#### Or

- (b) Write a detailed notes about the design patterns and give suitable example.
- 14. (a) Discuss in detail about the structural decomposition.

### Or

- (b) Explain about service oriented design.
- 15. (a) Explain design review and how to review against checklist.

#### Or

- (b) (i) Explain about testing in design review.
  - (ii) Give short notes of Task analysis.

#### PART C — $(1 \times 15 = 15 \text{ marks})$

16. (a) Describe in detail about the function oriented design case study.

Or

(b) Give detail notes on standard patterns from GOF book of patterns.

(3+3+3+4)

(7)

(6)

(7)