PCSS13 - Object Oriented Software Engineering

P. Pages : 1

Time : Three hours

1183

GUG/S/23/10942

Max. Marks : 70

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Notes :
1. Solve **any five** question.
2. All questions carry equal marks.
3. Due credit will be given to neatness and adequate dimensions.
4. Assume suitable data wherever necessary.
5. Diagrams and Chemical equation should be given wherever necessary.
6. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) What is software? Explain the nature of software. **7**

b) Differentiate between composition and aggregation. **7**

2. a) Draw and explain neat sketch of all UML Diagrams of banking system. **7**

b) Write a program in C++/Java for the concepts of encapsulation, polymorphism and inheritance. **7**

3. a) Draw class diagram and Interaction diagram for the following activities. **7**
   i) Withdrawing amount from automatic teller machine
   ii) Read message of a voice mail system

b) Explain the pipe and filter architectural pattern. **7**

4. a) Draw the sequence diagram for a library management system and explain it. **7**

b) Differentiate coupling & Cohesion is S/W design. **7**

5. a) Write short notes on domain analysis document for household alarm system. **7**

b) Explain different architectural patterns. **7**

6. a) Discuss a technique for making good design decisions. **7**

b) Describe related use cases that have to do with opening a file in an application. **7**

7. a) What are activity diagrams? Give a suitable example. **7**

b) What is cohesion? Give short definition of different types of cohesion. **7**

8. a) What is user centered design? Various ways to makes S/W development user Centered design. **7**

b) What is use case? Explain use case diagram with example. **7**

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