VT-F.H.Exam. April.-12-125

Con. 3634-12. (REVISED COURSE) **GN-7418**

(3 Hours) [**Total Marks : 100**

N.B. : (1) Question No. **1** is **compulsory**.
(2) Solve any **four** questions from **remaining**.
(3) Assume **suitable** data wherever **necessary**.

1. Design Domain-Specific Software Architecture (DSSA). For the Theater Ticket Management system. Assume suitable entities, attributes etc. Domain model must consists following :–
   (a) Domain Dictionary and Information Model, 10
   (b) Feature Model and Operational Model. 10

2. (a) Explain with a suitable example the event type connector and its variation 10 dimensions.
   (b) Define the following terminology :– 10
       (i) Configuration
       (ii) Architectural style
       (iii) Architectural patterns
       (iv) Accuracy and precision
       (v) Views and viewpoints.

3. (a) Define Architectural analysis. Discuss various analysis goals with an 10 example ?
   (b) Explain with an example stakeholder driven modeling. 10

4. (a) Explain various designing issues for following non-functional properties :– 10
       (i) Efficiency and Complexity
       (ii) Scalability and Hetrogeneity.
   (b) Discuss Service-Oriented Architectures (SOA) and Web Services. 10

5. (a) Explain with the help of suitable diagram Architectural Trade-off Analysis Method 10 (ATAM).
   (b) Explain the existing frameworks for the pipe-and-filter and C2 Architectural style. 10

6. (a) Discuss an Architectural Conception in Abscence of Experience. 10
   (b) Explain with an example Software System Mobility and Architecture. 10

7. Write short note on (any **two**) :– 20
   (a) Decentralized Architectures
   (b) REST
   (c) Software Architecture and Deployment
   (d) Lightweight C2 Framework.

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