

- N.B.:** (1) Question no. 1 is compulsory  
(2) Answer any four of the remaining six questions  
(3) All questions carry equal marks

1. (a) Construct an ER diagram for a hospital with a set of patients and a set of medical doctors. Associate with each patient a log of the various tests and examinations conducted. Document all assumptions that you make about the mapping constraints 10  
(b) Explain various fact finding techniques 10
2. (a) Compare Spiral Model and Waterfall Model and explain when to use each 10  
(b) Explain the importance of Input and Output design 10
3. (a) What is Structured Walkthrough? Explain its need 10  
(b) Explain different types of documentation 10
4. (a) What is SRS? Explain the role of system analyst in it 10  
(b) Explain the strategic approach to software testing 10
5. (a) Explain Structure chart and its types 10  
(b) Explain different activities of implementation and support phase 10
6. (a) Explain different Extreme Programming practices and principles 10  
(b) With the help of an example explain Hipo chart and Warnier Orr diagram 10
7. Write short notes on (any four):- 20  
(a) Black box testing 5  
(b) Normalization 5  
(c) SDLC 5  
(d) Decision tree vs. Decision Table 5  
(e) Cost benefit analysis 5

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