

[Time: - 3 Hours]

[ Marks: 80]

Please check whether you have got the right question paper.

- N.B: 1. Question No. 1 is compulsory.  
2. Attempt any three questions from remaining five questions.

1. a) Explain Spiral model in detail. 10  
b) Explain Project Life cycle. 10
  
2. a) What Extreme programming and Scrum. 10  
b) Explain the outsourcing and its type. 10
  
3. a) Assume that the size of organic type s/w project has been estimated to be 35 KLOC. 10  
The Avg. Determine the effort required to develop the s/w product & development time, average staff size and productivity for all three modes.  
Organic ( $a_1=2, a_2=1.05, b_1 = 2.5, b_2 = 0.38$ ), semi-detached ( $a_1 = 3.0, a_2 = 1.12, b_1 = 2.5, b_2 = 0.35$ ) Embedded ( $a_1 = 3.6, a_2 = 1.20, b_1 = 2.5, b_2 = 0.32$ )  
b) What is structure chart? Explain the transaction analysis? 10
  
4. a) Explain the Facilitating areas of Project Management. 10  
b) Explain the structured walkthrough in detail? 10
  
5. a) Explain software reliability metrics in detail. 10  
b) Consider a project with following functional units: 10  
No. of user inputs = 50  
No. of User outputs = 40  
No. of User Inquiries = 35  
No. of User files = 06  
No. of External Interfaces = 04  
Assume all Complexity adjustment factors and weighting factors are average.  
Compute the Function point for the project.
  
7. Short Note (any 4 out of 5) 20
  - a) Stakeholder Management
  - b) FAST
  - c) Project Charter
  - d) 3R of software engineering
  - e) RAD model