

(3 Hours)

Total Marks: 80

- Note:** 1) Question No.1 is compulsory.
2) Attempt any THREE from the remaining questions.
3) Figures to the right indicate full marks.

1. (a) Discuss Stakeholder Management. **5**
(b) What are the various methods of project implementation? Explain. **5**
(c) Explain FTR. **5**
(d) Assume a database system for an office automation project is to be developed. Project complexity is organic. The system mainly consists of following 4 modules: Data entry 0.6 KLOC, Data update 0.6 KLOC, Query 0.8 KLOC, Report generator 1.0 KLOC, System size 3.0 KLOC. Cost drivers are complexity: high (1.15), storage: high (1.06), experience: low (1.07), programming capability: low (1.17). Calculate the efforts, development time staff size and productivity.(Assume the constants $a_1=2.4$, $b_1=1.05$, $c_1=2.5$ and $d_1=0.38$). **5**
2. (a) Discuss Project Framework in detail. **10**
(b) Discuss the various tools used for Quality control. **10**
3. (a) What is Requirement Elicitation? Explain various methods used in it. **10**
(b) Discuss various leadership styles. **10**
4. (a) Discuss Spiral Model with its advantages and disadvantages. **10**
(b) The following table indicates the task for completing a software project activities and estimated duration for each task. Find CPM, Early Start, Early Finish, Last start, Late Finish and Slag time. Also, draw Network diagram for the same. **10**

| Task | Description | Duration | Predecessor |
|------|---------------------------|----------|----------------|
| T1 | Requirement Specification | 1 | - |
| T2 | Design | 2 | T1 |
| T3 | Code generate interface | 2 | T2 |
| T4 | Code sequence interface | 5 | T2 |
| T5 | Code user interface path | 3 | T2 |
| T6 | Code control process path | 1 | T2 |
| T7 | Integrated and tests | 6 | T3, T4, T5, T6 |
| T8 | User manual | 3 | T7 |

5. (a) Discuss the process used for developing the Business case. **10**
(b) Explain any two UML diagrams. **10**
6. (a) Discuss the various steps involved in Risk Management. **10**
(b) What is SRS? Why it is important to develop SRS. **10**