Sl. No.

B3.1-R5 : SOFTWARE PROJECT MANAGEMENT

NOTE :
1. **Answer question 1 and any FOUR questions from 2 to 7.**
2. **Parts of the same question should be answered together and in the same sequence.**

Time : 3 Hours   **Total Marks : 100**

1. (a) Mention the principles of Software Engineering.

    (b) How does software differ from the artifacts produced by other engineering disciplines ?

    (c) Explain the relationship between Scope, Time, Cost and Quality with respect to project management.

    (d) What is the role of WBS (Work Breakdown Structure) in project management ?

    (e) Write short notes on :

        (i) Milestones of project.

        (ii) Deliverables of project.

    (f) With a neat sketch, explain the flow of change management.

    (g) List out various scrum practices as carried out by the organization.

                                                                  (7x4)

2. (a) Enlist and explain various effort estimation techniques.

    (b) What do you mean by Gantt Chart ? Explain with an example. Also, enlist the applications of the same.

    (c) What is risk identification ? Describe the difference between risk components and risk drivers

                                                              (6+6+6)

3. (a) Explain the ISO standards in detail.

    (b) What do you mean by the term "Software Quality" ? Mention the attributes of software quality. Explain the process of "Change Logs" in Quality management.

                                                                     (9+9)

4. (a) What do you mean by the term Causal and Pareto Analysis ? How is it carried out ? Mention the advantages and disadvantages of Pareto Analysis.

    (b) What do you understand by software configuration ? What is meant by software configuration management ? How can you manage software configuration (only mention the names of the principal activities involved) ?

                                                                     (9+9)

5. (a) What is the importance of defect-tracking tools in quality management ? Explain any one such tool.

    (b) Explain why adding manpower to an already late project may not help to put it back on schedule ?

    (c) Which are the various common categories of project risk. Explain in detail.

                                                                  (6+6+6)

6. (a) Write short note :

      (i) Defect Tracking in Project Management.

      (ii) Risk Mitigation and Management.

    (b) During project scheduling why is it desirable to break down each task into smaller tasks ? What is the desirable granularity to which tasks should be broken down ?

(9+9)

7. (a) Suppose you are developing a software product in the organic mode. You have estimated the size of the product to be about 1,00,000 lines of code. Compute the nominal effort and development time.

    (b) Mention the difference between staffing and direction in project management.

    (c) What is 3-point time tracking ? Explain the importance of the same. How is 3-point tracking carried out ?

(9+4+5)

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