Register Number……...

M.E. DEGREE EXAMINATIONS: APRIL 2010

Third Semester

COMPUTER SCIENCE AND ENGINEERING

P07CSE19: Software Project Management

Time: Three Hours **Maximum Marks: 100**

Answer ALL the Questions:-

PART A (10 x 2 = 20 Marks)

1. What are the desirable characteristics of a true reusable component?
2 What is Process Tailoring? Can the project manager tailor the process at his will?
3. Describe the importance of the "vision document".
4. Define the terms (i) Breakage
   (ii) Modularity
5. What are type-1, type-2 & type-3 software change orders?
6. State the characteristics of the organic and embedded modes of a project in the COCOMO model?
7. What do you understand by (i) Rework Stability
   (ii) Rework Ratio
8. What is the use of Pareto Chart? Why is it called as 80-20 rule?
9. Name the various Maturity Levels of CMMI process model.
10. What is known as "Error Seeding"? Why is it important?

PART B (5 x 16 = 80 Marks)

11. (a) (i) List down & explain the key practices of improving Software Quality. (8)
    (ii) What do you understand by "Software Economics"? Explain the three generations of software economics (8)

(OR)

(b) Name the top 10 risks associated with the conventional software process & explain how these risks can be resolved using the modern process approach.

12. (a) Explain the Earned Value system of measuring financial performance in detail.

(OR)

(b) Explain the importance of the following

(i) Software change orders (8)

(ii) Configuration baselines. (8)

13. (a) (i) Explain the use of statistical control charts in data analysis. (8)

(ii) What is a quality plan? Outline the contents of a typical quality plan. (8)

(OR)

(b) (i) State and explain the principles of software defect prevention? (8)

(ii) Describe the Process Changes required to incorporate defect prevention with the help of a suitable diagram (8)

14. (a) Describe in detail the features of the COCOMO-II estimation model.

(OR)

(b) (i) List down & explain the various End-Product Quality Metrics. (8)

(ii) Summarize the important lessons learned from the CCPDS-R project (8)

15. (a) Explain the use of "Software Project Control Panel (SPCP) " in automating the Metrics program.

(OR)

(b) (i) Explain the salient features of the "Evolutionary Work Break Structures" (8)

(ii) Write notes on the following: (8)

a) Stakeholder Cohesion

b) Activities of the Software assessment team

****