

MCA - I

Time: 3 HRS

- 1) Question 1 is compulsory.
 2) Attempt any three questions from Q. 2 to Q. 6. Each question carries equal marks.

Max. Marks: 80

Q.1 Write short notes on any 4

- a) Mc Calls quality Model
- b) Role of Project Manager
- c) Data Flow Diagram
- d) Work Breakdown Structure
- e) Leadership styles
- f) Systems view of Project Management.

Q. 2 a) What is spiral model explain in detail. Write down its advantages.

- b) Define quality. Explain pareto analysis in detail.

Q.3 a) Consider a project with following functional units.

Number of user Inputs = 80

Number of user outputs = 60

Number of user enquiries = 55

Number of user files = 10

Number of external interfaces = 5

Assume all complexity adjustment factors and weighing factors are average.

Compute the function points for the project. (Assume weighing factors as 4, 5, 4, 10 & 7 respectively)

- b) Define project. Explain project management framework in detail.

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Q.4 a) The following table indicates the various tasks involved in developing any product, the corresponding activities and the estimated duration (in days) for each task. Show the activity network diagram and critical path.

Task	Description	Duration	Predecessor
A	Problem definition	10	-
B	Requirement gathering	20	A
D	Design	10	B
E	Coding	10	B,C
F	Quality Checking	5	D
G	Support	6	E
C	Implementation	10	E,F

- b) Explain project implementation plan in detail..

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Q.5 a) What is FTR and why it is required?

b) What are different Risk analysis and assessment techniques? Explain any one technique in detail.

Q.6 a) Write short notes on

- i) COCOMO Model
- ii) Staffing level estimation

b) What are different requirement elicitation techniques? Explain in detail.

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