

BE6: R3 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) What are the factors influencing the cost estimation of a software product.
- b) Which software development life cycle model is best suited for development of following software projects:
 - i) Compiler for Java
 - ii) University registration system
 - iii) Aircraft simulator
 - iv) Online railway reservation system
- c) Is it true that a software product can always be developed faster by having a large development team of software engineers? Justify your answer.
- d) Role of reviews in product quality assurance.
- e) It is extremely desirable to detect errors in the requirements before the design and development of the software begins comment.
- f) What are the Risk management activities for a software project?
- g) What are Verification and Validation activities in software development?

(7x4)

2. What is an SRS document? In relation to the SRS, explain functionality, characteristics and design constraints. State why it is difficult to gather requirements from a user?

(18)

3.

- a) Which are the parameters used for defining function-point, metrics. Also define productivity, quality, cost and documentations in terms of FPs?
- b) What is abstraction? Differentiate between procedural abstraction and data abstraction?

(10+8)

4.

- a) Why Pareto 80/20 rule should be applied to software risk analysis. What is RMMP Risk Monitoring?
- b) List the Software Quality Assurance activities. What are software reviews? What are its benefits?

(8+10)

5.

- a) What is software baseline and its significance? Describe various baselines.
- b) Besides the final code and the documentation, what are the intermediate outputs that should be produced for successful completion of projects? Why it is important to deliver these to the customers.

(10+8)

- 6.
- a) What is critical path and why it is important to identify critical path in software development cycle? How a critical path can be identified in a small network?
 - b) Obtain estimate of project expected completion time and show the critical path.

Table – Expected Time Calculations	
Activities	Three times estimates
1-2	2-3-10
1-3	2-4-6
1-4	2-6-10
2-5	1-1-1
3-5	4-5-12
4-5	2-3-4
4-6	2-5-8
5-6	3-5-13

(10+8)

7. Write short notes on the following:
- i) Function Point Method.
 - ii) Project Management issues in web based projects.
 - iii) Risk Analysis and Management in implementing projects in Embedded Systems.

(6+6+6)