

**MASTER OF COMPUTER APPLICATIONS
(MCA-NEW)**

Term-End Examination

June, 2022

MCS-213 : SOFTWARE ENGINEERING

Time : 3 hours

Maximum Marks : 100

(Weightage : 70%)

Note : Question no. 1 is **compulsory**. Attempt any **three** questions from the rest.

1. (a) Define Cleanroom Software Engineering. What is its significance ? Discuss the underlying principles of Cleanroom-based Software Development. 10
- (b) List and explain various phases of Spiral Model. 10
- (c) Write a short note on Cyclomatic Complexity. 10
- (d) Explain various levels of SEI-CMM. 10

2. (a) What is Unit Testing ? How does it differ from Integration Testing ? 10
- (b) Develop SRS for a “Railway Reservation System”. Make necessary assumptions. 10
3. (a) What is meant by “Change Management” ? Explain the process of Change Management. 10
- (b) What is Cohesion ? Explain various types of Cohesion. 10
4. (a) Draw the first 3-levels of DFD’s for a “Railway Reservation System”. Make necessary assumptions. 10
- (b) What is meant by “Verification” ? How does it differ from “Validation” ? Give an example for each. 10
5. (a) What is meant by “Version Control” ? Explain with an example. 10
- (b) Write a short note on “Baselines”. 10
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