

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

**Term-End Examination
December, 2024**

MCS-213 : SOFTWARE ENGINEERING

Time : 3 Hours

Maximum Marks : 100

Weightage : 70%

Note : (i) *Question No. 1 is compulsory.*

(ii) *Attempt any **three** questions from the rest.*

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1. (a) What is Prototyping ? Explain the *two* types of prototypes. What are the benefits of developing a prototype ? 10
- (b) Explain Putnam's model for estimation. 10
- (c) Explain the way the web applications are developed, tested and deployed. 10

- (d) What is meant by Software Process Optimization ? Explain architecture and design related optimizations. 10
2. (a) What is Formal Technical Review ? How is it performed ? What are its objectives ? 10
- (b) Explain various steps of Debugging. 10
3. (a) What is Cleanroom Software Engineering ? Explain the principles on whom the cleanroom based software development is based on. 10
- (b) What are CASE tools ? Explain various categories of CASE tools. 10
4. (a) Explain any *five* elements of Mobile Application Development. 10
- (b) How are software risks identified ? How are software risks managed ? 10

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5. (a) What is Software Reliability ? What are the assumptions on whom software reliability models are based upon ? 10
- (b) What is Cohesion ? Explain various types of cohesion. 10

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