

7. Differentiate between the following :

- (a) Module Coupling and Cohesion
- (b) Good design and Bad design
- (c) Testing and Debugging

8. (a) What is software maintenance ? What are its types ? Illustrate their importance and elaborate.

(b) What is Software Quality Assurance (SQA) ? What are the main activities in SQA plan ? How are these ensured ? Justify.

9. Explain the following :

- (a) Software Documentation
- (b) Software Configuration Management

Roll No. ....

**67194**

**MCA 4th Semester CBCS Scheme w.e.f.  
2017-18 (Re-appear)  
Examination – October, 2020**

**SOFTWARE ENGINEERING**

**Paper : 17MCA34DA2**

*Time : 1.45 Hours ]*

*[ Maximum Marks : 80*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt any *three* questions. All questions carry equal marks.

1. (a) What are the ways of minimizing software maintenance cost ?
- (b) What is the term software evolution ? Comment.
- (c) What are Information Flow metrics ? How are these helpful ? Discuss.

- (d) What are specification languages ? What are their objectives ? Discuss.
- (e) What is software process ? What are the characteristics of software process ? Explain.
- (f) What are different types of requirements ? State their relevance.
- (g) What is software retirement ? Elaborate the term.
- (h) What are code walkthroughs ? Outline their relevance.
2. (a) What are software lifecycle models ? Discuss the essence of software lifecycle models.
- (b) What is software project planning ? Outline the goals of software project planning as well as the activities involved in software project planning.
3. (a) What is software engineering ? Discuss the principles of software engineering as well as the essential characteristics of a well engineered software product.

- (b) What are software risks ? What are the activities related to risk management ? Discuss.

4. (a) What are software project estimation models ? How are these relevant in software development ? Justify.
- (b) What is SRS document ? How is it populated ? State the relevance of specification languages.
5. Differentiate between the following :
- (a) Functional and Non-functional requirements
- (b) Function Points and Token Metrics
- (c) McCabe's Cyclomatic and Knots Metrics
6. (a) What is meant by software testing ? How is testing important in software lifecycle ? Discuss the objectives of software testing.
- (b) What are CASE tools ? Discuss various types of CASE tools indicating their respective usefulness.