

**MSCCS-09/MSCCS-203/  
MSCCSC-203/MCA-203**

**December – Examination 2022**

**MSCCS (Final)/MCA (IInd Year)  
Examination**

**SOFTWARE ENGINEERING**

**Paper : MSCCS-09/MSCCS-203/  
MSCCSC-203/MCA-203**

*Time : 3 Hours ]*

*[ Maximum Marks : 80*

*Note :-* The question paper is divided into three Sections A, B and C. Write answers as per the given instructions.

**Section-A**

**8×2=16**

**(Very Short Answer Type Questions)**

*Note :-* Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries 2 marks.

1. (i) Define Software Engineering.
- (ii) What is Software development life-cycle ?

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- (iii) What is mutation testing ?
- (iv) What is E-R diagram ?
- (v) Define Software Process.
- (vi) Define System Modeling.
- (vii) What is role of data dictionary ?
- (viii) What is DFD ?

**Section-B** **4×8=32**

**(Short Answer Type Questions)**

*Note* :- Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 8 marks.

- 2. What are the major differences between system engineering and software engineering ?
- 3. Explain Waterfall model.
- 4. Explain component based development model in detail.
- 5. Differentiate functional and non-functional requirement.
- 6. Explain data architectural and procedural design for a software.

- 7. Discuss the differences between black box and white box testing.
- 8. What is need for software maintenance ?
- 9. Explain COCOMO model.

**Section-C** **2×16=32**

**(Long Answer Type Questions)**

*Note* :- Answer any *two* questions. You have to delimit your each answer maximum up to **500** words. Each question carries 16 marks.

- 10. Write short notes on the following :
  - (a) Cost estimation method
  - (b) RAD model
- 11. Explain the evolutionary and incremental model. What are the advantages and disadvantages ?
- 12. Explain software prototyping. What are the various prototyping methods and tools ?
- 13. Explain the CASE repository function in detail.