

9. Explain the following with examples :

(a) Software reverse engineering and its advantages and applications 10

(b) Software Reuse, its benefits and implementation 6

Roll No.

67063-N

MCA 2nd Semester 2 yr. Course

(w. e. f. 2020-21)

Examination – July, 2022

SOFTWARE ENGINEERING

Paper : 20MCA22DB2

Time : Three 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 five questions in all, Question Number 1 is compulsory. In addition to compulsory question, student has to attempt four more questions selecting one question from each Unit. All questions carry equal marks.

1. Answer the following questions briefly : 8 × 2 = 16

- (a) What is software engineering ?
- (b) Explain CASE tools.
- (c) Explain role of coupling in software design.

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- (d) Describe function point.
- (e) Explain black box testing briefly.
- (f) Discuss interface design with an example.
- (g) What is Software Crisis problem ? Why it happened ?
- (h) Explain role of validation in software development.

UNIT - I

- 2. (a) What is prototyping ? Compare it with water fall model. Which one is more costly and why ? Discuss with examples. 10
- (b) Explain software functional requirements and their validation with examples. 6
- 3. Explain the following briefly with suitable examples :
 - (i) Iterative Enhancement model and its advantages
 - (ii) Object-oriented model 8, 8

UNIT - II

- 4. (a) What are design structure charts ? How these are useful and used ? Explain with suitable examples. 6
- (b) Explain software design principles with suitable examples. 10

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5. Describe the following with examples : 16

- (i) Software reliability and its metrics
- (ii) White box testing and its merits

UNIT - III

- 6. (a) Define software quality ? How is it used and useful ? Explain its attributes with suitable examples. 10
- (b) Discuss project scheduling and its advantages with examples. 6

7. Explain the following with examples :

- (a) Proactive risk strategies and risk projection and refinement 6
- (b) COCOMO model and its uses 10

UNIT - IV

- 8. (a) Define software configuration management ? How is it useful and used ? Discuss its implementation and applications with suitable examples. 10
- (b) Explain software documentation and evolution with suitable examples. 6

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