

Roll No.

23729

**M. Tech. 1st Semester (Artificial
Intelligence and Data Science)
Examination – February, 2022**

SOFTWARE ENGINEERING

Paper : 21MTAI21C4

Time : Three Hours] [Maximum Marks : 100

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, selecting **one** question from each Unit. Question No. 1 is compulsory. All questions carry equal marks.

1. Write short notes on the following : **5 × 4 = 20**

- (a) Token count
- (b) Software prototyping
- (c) User interface design
- (d) Structural testing

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UNIT - I

2. Describe the following :

10 + 10 = 20

- (i) Evolutionary model
- (ii) Waterfall model

3. Explain the following :

10 + 10 = 20

- (i) Data structure metrics
- (ii) Design metrics

UNIT - II

4. (i) Describe Putnam Resource allocation model in detail. 10

(ii) What do you mean by Risk Management ? Explain in detail. 10

5. Explain the following :

10 + 10 = 20

- (i) Software requirement and specification
- (ii) Entity relationship diagrams

UNIT - III

6. Describe cohesion and coupling. Explain its types in detail.

20

7. Give a complete description about software reliability.

20

UNIT - IV

8. Explain the following :

10 + 10 = 20

- (i) Testing tools and standards
- (ii) Debugging

9. Explain the following :

10 + 10 = 20

- (i) Software Reengineering
- (ii) Configuration Management