SH-IV/Com.Sc./402/C-9/19

B.Sc. 4th Semester (Honours) Examination, 2019 COMPUTER SCIENCE

(Software Engineering)

Paper : 402/C-9 Course ID : 41512

Time: 1 Hour 15 Minutes Full Marks: 25

The figures in the right hand side margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the right hand side margin indicate marks.

The questions are of equal value.

1. Answer *any five* questions:

 $1 \times 5 = 5$

- (a) Define the term software reliability.
- (b) Write down some advantages of waterfall model.
- (c) State various components of a software.
- (d) Differentiate between verification and validation.
- (e) What is process framework?
- (f) Define software measurement.
- (g) What is data dictionary?
- (h) What is software prototyping?

2. Answer *any two* questions:

 $5 \times 2 = 10$

- (a) Explain COCOMO model with example.
- (b) Explain spiral model in detail.
- (c) Distinguish between 'process' and 'project' metrices with example.
- (d) Explain how software quality is assured through software metrices.

3. Answer *any one* questions:

 $10 \times 1 = 10$

- (a) Why software testing is required? Differentiate between White box testing and Black box testing. 4+6=10
- (b) What is software design? Explain objectives and principles of software design. 3+7=10