

**SOFTWARE ENGINEERING(5.1)2020**

**F.M-70**

-1

(a) Discuss some of the Software Engineering ethics followed by Software organization. (8 marks)

(b) For what type of s/w water fall model is feasible. Discuss how prototype and Iterative model are more useful than waterfall.

(6 marks)

OR

(c) Define Rational unified Development? What steps are followed in Rational unified model ? (7 marks)

(d) Define Scrum. Write the steps followed in implementing Scrum

(7 marks)

-2

(a) Define SRS. Differentiate between functional and non-functional requirements.

(5 marks)

(b) Draw a sequential diagrams for accounts log-in in SBI online website and with log-in id, password and captche

(9 marks)

OR

(c) State different types of Architectural styles in software engineering

(6 marks)

(d) Draw a sequential diagram for card verification using pin number and card input.

(8 marks)

-3

(a) State the laws of Program evaluation. (8 marks

(b) Define Testing. State how unit testing is different from integration and system testing

(6 marks

OR

(c) Discuss some Programming styles used in coding.

(4 marks

(d) State the different types of relationships implemented in class diagram

(7 marks

(e) Define non-functional testing ? Give examples

(3 marks

-4

(a) Discuss various properties of dependability

(5 marks

(b) Define S/W reliability . Explain the various reliability parameters

( 9 marks

OR

(c) State the different types hazards that may threaten a s/w system. Discuss the steps in safety specification.

(8 marks

(d) Write short notes

(6 marks

-Socio-technical systems

-S/W Risks

-Complex System

-5

(a) Discuss various techniques of Dependable Programming

(5 marks

(b) Define S/W security. Discuss the steps in security Engineering (9 marks

OR

(c) Write short notes

(4 marks

-static analysis

-Reliability testing

(d) State how fault tolerance is achieved in Dependable engineering.(6 marks

(e)What is security testing . Discuss its types

(4 marks