

MCA -4th sem-CS 4.3- (2020-21), Date of Examination-24.9.2021

CS 4.3- Software Engineering

Full marks-70

Time- as per programme

Answer all questions

(The number shown in right hand margin indicate marks)

Answer within 300 words maximum

1. What is software? What are the software development life cycle phases? Elucidate the key features of the software process models with suitable examples. 2+2+10

OR

What is extreme programming? Explain how the principles underlying agile methods lead to faster software development and deployment. 4+10

2. Explain the software requirement engineering process with neat diagrams. 14

OR

Discuss the following: 3.5x4=14

- (a) Illustrate 'dependency' relationship of class diagrams?
- (b) Explain 'aggregation' relationship of class diagrams with the help of an example?
- (c) Explain 'Association' relationship of class diagrams with an example?
- (d) Illustrate 'Generalization' relationship of class diagrams?

3. Explain the unit testing and Integration testing process with an example. 14

OR

Discuss the differences between black box and white box testing models. Discuss how these testing models may be used together to test a program schedule. 14

4. Explain in detail about the risk management in a software development life cycle. 14

OR

What is software dependability? How can it be evaluated, Discuss with examples? 14

5. Discuss about the COCOMO-II models for software estimation. 14

OR

What is project quality assurance? Discuss about static analysis techniques to ensure product quality. 14
