

**I M.Tech - II Semester - Supplementary Examinations
JULY - 2019**

**SOFTWARE ENGINEERING
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Max Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) What are the characteristics of software? Explain the following software myths:
i) Management myths. ii) Practitioner's myths. 7 M

- b) Explain in detail all the levels of CMMI with key process area. What is process assessment? Explain with suitable diagram. 7 M

2. a) What do you understand by evolutionary model? Draw and explain the spiral model with its Advantages and disadvantages. 7 M

- b) Explain two main types of requirements. What are the problems that arise during requirement analysis? 7 M

3. a) Justify why requirement engineering works as a bridge between design and construction. 7 M

- b) Compare behaviour models with data models. 7 M
4. a) Explain the usage of architectural styles and patterns in design engineering. 7 M
- b) What is modularity? For good quality software, modularity is important. Justify. 7 M
5. a) How system modelling is achieved using UML? What is the importance of use-case diagrams in software development? 7 M
- b) Explain function oriented design. How this approach is different from object oriented design? 7 M
6. a) Distinguish between White Box and Black Box testing. 7 M
- b) Discuss in detail about Metrics for Analysis Model and Design model. 7 M
7. a) Explain various risk management activities. Mention various types of software risks. 7 M
- b) What do you mean by software metric? Describe its advantages. 7 M

8. a) Write a detailed note on statistical software quality assurance. 7 M

b) Discuss about ISO 9000 Quality standards for software. 7 M