**20CS503/20CB503/20DS503/20IT503**

**Hall Ticket Number:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **III/IV B.Tech (Regular) DEGREE EXAMINATION** | | | |
| **February,2023** | **Common to CB,CS,DS & IT Branches** | | |
| **Fifth Semester** | **Software Engineering** | | |
| **Time:** Three Hours | | **Maximum :** 70 Marks | |
| *Answer Question No.1 compulsorily.* | | | (1X14 = 14 Marks) |
| *Answer ONE question from each unit.* | | | (4X14=56 Marks) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Answer all questions | | | (1X14=14 Marks) | | |
|  | a) | | What are the characteristics of the software? | L2 | CLO1 | 1M |
|  | b) | | What are the umbrella activities of a software process? | L2 | CLO1 | 1M |
|  | c) | | Define Software Engineering.. | L1 | CLO1 | 1M |
|  | d) | | Define use case. Give an example. | L1 | CLO1 | 1M |
|  | e) | | What is agility? | L1 | CLO2 | 1M |
|  | f) | | What is Refactoring? | L2 | CLO2 | 1M |
|  | g) | | Define Behavioural Modelling. | L2 | CLO2 | 1M |
|  | h) | | Define Requirements Engineering. | L1 | CLO2 | 1M |
|  | i) | | List commonly used architectural styles. | L1 | CLO3 | 1M |
|  | j) | | Define Component. | L2 | CLO3 | 1M |
|  | k) | | What is software Architecture? | L1 | CLO3 | 1M |
|  | l) | | Define software Quality. | L2 | CLO4 | 1M |
|  | m) | | Define software testing. | L1 | CLO4 | 1M |
|  | n) | | Define project metrics. | L1 | CLO4 | 1M |
| **UNIT I** | | | | | | |
| 2 | a) | Apply waterfall model for development of a telephone directory system. Indicate in detail each of the steps. | | L3 | CLO1 | 7M |
|  | b) | Explain in detail about process assessment. | | L1 | CLO1 | 7M |
| **(OR)** | | | | | | |
| 3 | a) | Differentiate Personal and Team Process Models | | L2 | CLO1 | 7M |
|  | b) | Mention the important phases of spiral model of software development. Compare the relative merits and demerits of spiral model with the prototype model. | | L2 | CLO1 | 7M |
| **UNIT II** | | | | | | |
| 4 | a) | Explain briefly about scrum process model? | | L1 | CLO2 | 7M |
|  | b) | What is the purpose of requirements elicitation? who are the different stakeholders involved in requirements elicitation? | | L2 | CLO2 | 7M |
| **(OR)** | | | | | | |
| 5 | a) | Explain requirement engineering tasks? | | L1 | CLO2 | 7M |
|  | b) | Explain flow oriented modelling. | | L1 | CLO2 | 7M |
| **UNIT III** | | | | | | |
| 6 | a) | Briefly explain taxonomy of Architectural Styles. | | L1 | CLO3 | 7M |
|  | b) | Describe the process of translating requirements in to design model with a neat diagram. | | L2 | CLO3 | 7M |
| **(OR)** | | | | | | |
| 7 | a) | Describe the characteristics of good design. | | L2 | CLO3 | 7M |
|  | b) | Write about the interface design evaluation. | | L1 | CLO3 | 7M |
| **UNIT IV** | | | | | | |
| 8 | a) | Write about size-oriented and function-oriented metrics. | | L1 | CLO4 | 7M |
|  | b) | Discuss about ISO 9000 Quality Standards and SQA Plan | | L1 | CLO4 | 7M |
| **(OR)** | | | | | | |
| 9 | a) | Explain about integration testing strategies for conventional software system. | | L1 | CLO4 | 7M |
|  | b) | Explain about formal technical reviews in detail. | | L2 | CLO4 | 7M |

