**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, November 2022**

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|  | **3BT5187** | Roll No. | Total Printed Pages: 2 |
| **3BT5187** |  |
| B. Tech. III Year V-Semester (Main/Back) End Semester Examination, November 2022  **(CE / AI)** | |
| **BCE05101 / BAI05109 : Software Engineering** | | | |

# Time: **3** Hours. Total Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

# **1.--------------------------Nil--------------------** **2.------------------Nil-----------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | What is the life cycle of Software Development? Explain all phases. | **(6)** | **Explainable** |
|  |  |  |  |  |
|  | **(b)** | What is DFD? Explain its all types. | **(6)** | **Understandable** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.2** | **(a)** | What is prototype Modal in Software Engineering? Explain its phases. | **(6)** | **Explainable** |
|  |  |  |  |  |
|  | **(b)** | What do you understand by Decision Table? Explain with example. | **(6)** | **Explainable** |
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|  |  | **UNIT-II (CO2)** |  |  |
|  |  |  |  |  |
| **Q.3** | **(a)** | What do you understand by Design Heuristic in software engineering? | **(6)** | **Understandable** |
|  |  |  |  |  |
|  | **(b)** | Explain second level of design in software engineering. | **(6)** | **Explainable** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.4** | **(a)** | What is meant by software maintenance in software engineering? Explain its types | **(6)** | **Explainable** |
|  |  |  |  |  |
|  | **(b)** | What is the difference between Structure Analysis and Structure Design? | **(6)** | **Analysing** |
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|  |  | **UNIT-III (CO3)** |  |  |
|  |  |  |  |  |
| **Q.5** | **(a)** | How can you generate data? Explain all three types of generation of test data. | **(6)** | **Explainable** |
|  |  |  |  |  |
|  | **(b)** | Explain three types of approaches in Unit Level Testing. | **(6)** | **Explainable** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.6** | **(a)** | What is test plan in software engineering? Explain all the steps. | **(6)** | **Explainable** |
|  |  |  |  |  |
|  | **(b)** | What do you understand by Acceptance Testing? Write down the differences between Alpha Testing and Beta Testing. | **(6)** | **Understandable** |
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|  |  | **UNIT-IV (CO4)** |  |  |
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| **Q.7** | **(a)** | What do you understand by Software configuration management? | **(6)** | **Understandable** |
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|  |  |  |  |  |
|  | **(b)** | What are the three phases of Software Quality Assurance? Explain. | **(6)** | **Explainable** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.8** | **(a)** | What do you understand by ISO? Explain ISO 9001, ISO 9002 and ISO 9003. | **(6)** | **Understandable** |
|  |  |  |  |  |
|  | **(b)** | What is SEI CMM? Explain its five important levels. | **(6)** | **Explainable** |
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|  |  | **UNIT V (CO5)** |  |  |
|  |  |  |  |  |
| **Q.9** | **(a)** | What is CASE tool in software engineering? What are three types of CASE tools? | **(6)** | **Explainable** |
|  |  |  |  |  |
|  | **(b)** | What is software Project Management and what is the responsibility of a Software Project Manager? | **(6)** | **Understandable** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.10** | **(a)** | What is Software Project Scheduling? Write down differences between Planning and Scheduling. | **(6)** | **Analysing** |
|  |  |  |  |  |
|  | **(b)** | Consider a software project using semi-detached mode with 30,000 lines of codes. Obtain estimation cost for this project.  Use this table –   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Project Level | a | b | c | d | | Organic | 2.4 | 1.05 | 2.5 | 0.38 | | Semi-detached | 3.0 | 1.12 | 2.5 | 0.35 | | Embedded | 3.6 | 1.20 | 2.5 | 0.32 | | **(6)** | **Numerical with explaination** |