**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, April 2023**

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|  | **1BC2199** | Roll No. | Total Printed Pages: 2 |
| **1BC2199** |  |
| BCA I Year II-Semester (Back) End Semester Examination, May 2022  **(Gen.)** | |
| **BCACCA2105 : 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)** | Suppose you are working in an organization as a software engineer. Now Your project leader is saying that you have to use Spiral model for this project. Define Spiral model and how you will implement this for your project. | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | Describe the Software Engineering paradigm? Explain briefly with suitable diagram. | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  |  | **OR** | |  |  |
|  |  |  | |  |  |
| **Q.2** | **(a)** | Explain the importance of Software Engineering? What should be steps take under the process of Developing software? | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | Explain the design principle of software Engineering | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  |  | **UNIT-II (CO2)** | |  |  |
|  |  |  | |  |  |
| **Q.3** | **(a)** | What is meant by software prototyping? Could you explain in short way the importance of Feasibility Study? | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | Software Analysis… Explain? Write down the principles of Software Analysis. | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  |  | **OR** | |  |  |
|  |  |  | |  |  |
| **Q.4** | **(a)** | Distinguish between Functional and Structural Testing. Define the generation of Data. | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | What is Structured analysis? Explain the different types of tools in Structured Analysis. | | **(6)** | **Remember & Create** |
|  |  |  | |  |  |
|  |  | **UNIT-III (CO3)** | |  |  |
|  |  |  | |  |  |
| **Q.5** | **(a)** | Define System Engineering? What do you mean by modular design? | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | Distinguish between Real time software design & Real time executive. In software engineering how to implement the concept of Analysis. | | **(6)** | **Create** |
|  |  |  | |  |  |
|  |  | **OR** | |  |  |
|  |  |  | |  |  |
| **Q.6** | **(a)** | Why monitoring & control system is required in Software Design. Explain in elaborately. | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  |  |  | |  |  |
|  | **(b)** | Write down the objectives of Testing? Briefly explain. | | **(6)** | **Create & Remember** |
|  |  |  | |  |  |
|  |  | **UNIT-IV (CO4)** | |  |  |
|  |  |  | |  |  |
| **Q.7** | **(a)** | Define Software Testing. How many types of Software Testing are available? Explain Unit testing. | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | What qualities a software tester should have. What is Black Box testing? Explain. | | **(6)** | **create** |
|  |  |  | |  |  |
|  |  | **OR** | |  |  |
|  |  |  | |  |  |
| **Q.8** | **(a)** | Give some example of Non-functional testing? Write down the benefits of Test Report? | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | | What are the types of metrics? Could you explain the concept of software maintenance? | **(6)** | **Create** |
|  |  | |  |  |  |
|  |  | **UNITV (CO5)** | |  |  |
|  |  |  | |  |  |
| **Q.9** | **(a)** | Define COCOMO model. Define the practical implementation of COCOMO model. | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | What exactly is project planning? What resources are necessary for project development? | | **(6)** | **Remember & Create** |
|  |  |  | |  |  |
|  |  | **OR** | |  |  |
|  |  |  | |  |  |
| **Q.10** | **(a)** | Define analysis and Design & categories of CASE classification. | | **(6)** | **Remember** |
|  |  |  | |  |  |
|  | **(b)** | **Write down the advantages of project scheduling?** | | **(6)** | **Create** |