|  |  |
| --- | --- |
| **SESSION** | **MARCH 2024** |
| **PROGRAM** | **BACHLEOROF COMPUTER APPLICATIONS (MCA)** |
| **SEMESTER** | **V** |
| **COURSE CODE & NAME** | **DCA3103 – SOFTWARE ENGINEERING** |
|  |  |
|  |  |

**Set-I**

**1. State the advantages and disadvantages of different software development models.**

**Ans 1.**

**Software Development Models: Advantages and Disadvantages**

Software development models direct the creation of software and impact the project's outcomes team dynamics, project outcomes, and the final product's quality. Different models are suited to various needs of projects and organizational structures. In this article, we will explore the pros and cons of three popular models that include The Waterfall model Agile model and Spiral model.

**Waterfall Model**

**Advantages:**

* **Structured Methodology:** The Waterfall model is a sequential design method which

Its Half solved only

Buy Complete assignment from us

**Price – 190/ assignment**

**MUJ Manipal University Complete SolvedAssignments session FEB 2024**

buy cheap assignment help online from us easily

we are here to help you with the best and cheap help

**Contact No – 8791514139 (WhatsApp)**

**OR**

**Mail us- [bestassignment247@gmail.com](mailto:bestassignment247@gmail.com)**

**Our website -** [**www.assignmentsupport.in**](http://www.assignmentsupport.in)

**2. i. Explain the various guidelines for data design.**

**ii. Discuss various functions of architectural design.**

**Ans 2.**

**i. Guidelines for Data Design and Functions of Architectural Design**

Data design in software engineering as well as architectural design play a crucial role in making sure that the effectiveness and efficiency of the system. In this article, we will explore the principles of data design and the roles that architectural designs play.

**Guidelines for Data Design**

Data design is the process of defining the data structures which will be utilized in an application software. A well-designed data design will ensure that your database will be designed to be

**3. Briefly explain the different approaches to software process assessment and its improvement.**

**Ans 3.**

**Approaches to Software Process Assessment and Improvement**

Assessment and improvement of software processes is essential to ensure that practices for software development are effective and efficient which results in better quality products and greater satisfaction for the stakeholders. Different frameworks and methodologies have been created to evaluate and improve the quality of software development processes. This article

**Set-II**

**4. List thevarious characteristics of software testing.**

**Write a short note on**

**a. White Box Testing**

**b. Black Box Testing**

**Ans 4.**

**Characteristics of Software Testing**

Testing software is an integral element of the development process to ensure that the final product is in line with the specifications and is free of defects. The main features of software testing are:

* **Systemsatic:** Tests should be carried out in a systematic and organized manner to cover every aspect that the program.
* **Purposeful:** Every test should be able to clearly define the purpose of the test regardless of whether it's to test the functionality, validate design or evaluate the performance of the.
* **Reproducible:** Tests must be designed to yield the same results when they are run in the

**5. Define Software maintenance and explicate its various tasks.**

**Ans 5.**

Software maintenance is an essential stage in the software development lifecycle. It begins after the software has been deployed and continues for a long time. It is a series of activities that aim at updating and modifying software programs after they have been implemented. The goal of software maintenance is to fix any errors and improve performance, or other aspects, or to adapt the software to a changing environment. This process of continuous maintenance is vital as it

**6. i. Briefly explain the Process of Agile Software Development.**

**ii. Differentiate traditional Software Engineering and Modern Engineering.**

**Ans 6.**

**Process of Agile Software Development**

The Agile Software Development is a method that encourages a disciplined management approach that promotes regular inspection and change and a management philosophy that promotes self-organization, teamwork and accountability. It is a collection of best practices in engineering designed to facilitate the rapid delivery of top-quality software and a business strategy that focuses on customer requirements and goals of the company. Agile development is a process of development that is in line to the principles of the Agile Manifesto. The manifesto was created by a group of 14 prominent figures from the field of software development, and is