**BISMA**

**Model Answer Paper**

**MCA IV Sem**

**Paper :- Software Engineering and UML**

**Max. Marks 20**

**I- Each question carry one marks (4\*1=4)**

**Q.1 What do you mean by software?**

**Ans:** A software system or software is:

(i) Instructions/Computer programs that when executed provide desired function & performance.

(ii) Data structures that enable the programs to adequately manipulate information.

(iii) Documents that describe the operation and use of the programs.

We can say that a software system consists of a number of separate programs, configuration files, which are used to setup these programs, system documentation, which describes the structure of the system & user documentation which explains how to use the system & website for users to download recent product information.

**Q.2 Define Software Engineering.**

**Ans:** Software Engineering (SE) is the establishment & use of sound engineering principles in order to obtain economic, reliable and efficient software. Software Engineering is the application of a systematic, disciplined, quantifiable approach to the development, operation & maintenance of software

**Q.3 What is the basic structure of software development process?**

**Ans:** A software development process model is an abstract representation of a software Process or is a brief overview of the software process. Basic structure of the software development process is

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**Q.4** What is Concurrent developmental model?

Ans: In concurrent Engineering model all activities of development are done simultaneously in parallel. For each activity, a state transition diagram is made, where all events of an activity are shown as states & there should be transitions between them. It Provides an accurate idea about the states of the project.

**[II] Each carries 2 marks: (2\*2=4)**

**Q.1 What are Software Myths?**

**Ans:** Most, knowledgeable professionals have recognized myths or beliefs (untrue beliefs or explanations) which are misguiding the attitudes (of the users) causing serious problems for managers & technical persons. Different types of Myths relevant to the software are as classified

* Management Myths
* Customer Myths
* Practitioner’s Myths

Q.2 **What are the basic project management process activities**?

Ans: The basic project management process activities are:

1- Proposal Writing

2- Project Planning & scheduling

3- Project Costing

4- Project monitoring & reviews

5- Personal Selection & Evaluation

6- Report Writing & Presentations

7- Quality Management

8-Configuration Management

**II] Each carry 2.5 marks. (2.5\*2=5)**

**(a)** **What are the uses of Prototype Model Mode?**

**Ans:** Prototype Model is also called as Rapid Prototype model.

- It removes the limitation of the waterfall model.

- A Basic model or prototype is developed before the actual model.

- It is built very rapidly & fast, so that it can be checked time to time by the customer.

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**Q.2-** **What are the advantages and disadvantages of Spiral Model?**

**Ans:- Advantages of the Spiral Model**

* - Software remains active throughout its life
* - Software in maintainable
* - Realistic Approach
* - Reduced Risk
* Disadvantage of Spiral Model
* - It is difficult to satisfy the customer during evolution
* - Risk analyst is required
* - Slow development
* - High monetary cost
* - Requires more efforts for implementation

**[IV] One question of 7 marks. (7\*1=7)**

 **Q. 1 Explain Waterfall model / linear Sequential Model.**

**Ans:** Waterfall model is:

* The simplest oldest process model
* Best suited where requirements can be clearly defined.
* Steps of development are followed consecutively
* Each step involves detailed activities
* Each step produces an output which becomes the input of the next step.

Major phases/steps of the waterfall model are

