ADL is used to describe a software architecture. An ADL may be a formal or semi-formal descriptive language, a graphical language, or a mix of both. The role of ADL lies in the ability to describe a software architecture so it can be analyzed

University of Sargodha

BS 4th Semester, Final Term Exam 2018

Subject: I.T Course: Software Engineering (CMP: 3310)

Time Allowed: 2:30 Hours **Maximum Marks: 50**

predictable risks:

Unrealistic delivery date → staff turnover → poor communication with customers

Note: Objective part is compulsory. Attempt any four questions from subjective part.

Objective Part (Compulsory)

Q.No.1. Write short answers of the following in 2-3 lines each

- Define software engineering. 15
- Define Proactive Risk Management 78
- Differentiate stage, task and phase patterns 35
- What are formal methods? 346
- Define Regression Testing 478
- What are the umbrella activities? 78
- Provide an example of software project that would be applicable to the incremental model
- What is CMM? 832
- What is smoke testing? 479
- Describe the concept of refactoring and pair programming
- What does win-win mean in the context of negotiation during the requirement engineering?
- What is data abstraction and procedural abstraction? 232
- Describe the difference between "known risks" and "predictable risks" 79
- What is a Process Framework? 17
- Difference between Verification and validation 468
- What is Architectural description language 276

formal methods are system design techniques that use rigorously specified mathematical models to build software for hardware systems.

An incremental model is the software development process which is mostly adopted. Some of the famous models include Agile, waterfall, incremental, RAD, iterative, spiral etc.

These risk are usually mapped after the project plan is evaluated

A win-win situation is one in which the customer wins by getting the system or product that satisfy the majority of the customers needs & the software team wins by working for realistic & achievable budgets & deadlines.

Q.No.2. Define Requirement Engineering and describe the steps involved in Requirement engineering? 132

Q.No.3. What is architecture? Describe architectural styles that are used to categorize computer based systems. chp:13 (12)

Q.No.4. a) What are the main Elements of SQA. Explain in details chp: 21 (6)

b) What is a myth? Give a focus on various software myths regarding Management and Practitioner. chp:2 (6)

Q.No.5. a) Describe the different phases of SDLC (4)

b) Briefly explain Fact-finding techniques (8)

Q.No.6. a) What are the design principles? Explain in detail chp:12 (6)

b) What is software maintenance? Explain in detail chp:36 (6)

Q.No.7. What is agility? Describe the agile principles. chp:5 (12)

Verification	Validation
⇒ are we implementing the system right	⇒ are we implementing right system.
⇒ It is human base checking of document & files	⇒ It is computer based execution.
⇒ verifies that output are according to inputs are not.	⇒ validates that user accept the software or not.

Risk, Testing, SQA

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