Name Sohaib Ahmad

Reg L1F18BSCS0411

Section E

Question - 1:-

A)

The concept of chaos in Software engineering is not as clear. It refers to the overwhelming force of change in modern development and the impact this has on discipline of SE. In some environmental requirements may be unknown before the project get under way. changing requirments always been a big problem for Software developers. They have reponded to these changes with hysterical cries of "make the chaos go away".

To overcome the chaos in Software Engneering, there should be a Process for incrementaly developing software in complex.

Subject: Date:

It provides the imperial controls that allow the development to occur as close to the edge as the developing software in complex.
it provides the imperial controls that allow the development to occur as close to the edge of the choas as the developing software in complex.
it provides the imperial controls that allow the development to occur as close to the edge of chaos as the develping organization can tolerate.

Basic Features:-

→ The software should embrace changes.
→ process of building software in complex environment
→ it should be focused on small teams.
→ it should make attempt to facilitate the process.

In general context chaos referred as un-desired dis-ordered quantity.

Subject: Date:

(B) :-

Business Problem:-

Solution To This Problem:-

→ Hiring of Experienced Employee.
→ Candidate should be sincerely towards their work.
→ Hiring Eligible Employees.
→ Hiring of experienced Employee.
→ AT Time of hiring employees their performance should be fully tested.
→ Provide good work shops to spread the knowledge and experience of the hired employee.

Q No 2:-

(A)

{System Approach}

System approach is based on the generalization that everything is inter-related and inter dependent. A system is composed of related and dependent elements which

Subject: Date:

is interacting, forms a unitary system. A system is made up of five components.

→ Software
→ hardware
→ Data
→ process
→ people

for example:-

A classroom may be portrayed as a system in which teachers collaborated with students in the shared construction of meaning in the content of community expectation under constrains of limited and resource.

Part B:-

⇒ Distance Education:-

Distance learning also called distance education, e-learning

and online learning form of education in which the main elements include physical separation of teacher and student during instruction and the use of various technologies to facilitate the student. Distance education has become popular HEI as a model of education which can help them to gain the international prestige as well as increase their Students.

C:-

{Software Quality Factors.}

According to McCall's model Product operation category includes five software quality factor which can directly affect the daily operation of software.

{Correctness}

It deal with the correctness of output of software system.

For example:

The correct display of remaining balance of account in text message.

Subject: Date:

Reliability:-

It involves the failure service of software. The determine the maximum failure rate of software system.

For Example:

Failure frequency of money transacting is within 10 minutes per month during banks office hours.

Efficiency:-

It deal with hardware resources needed to perform different task of the software system.

For Example:

This software system operates on 100gbs of memory and for lagless experience it required 8gb RAM.

Integrity:

It deals with the system software security system. How much the software is protected.

Subject: Date:

For example:
when we do online shopping our banks cards contains personal data should be save and protected.

Usability:
It deals with staff resources needed to train a new employee to operates the software system.

For example:
The software requirements documents for the help desk system Special workshops for training of employees.

Q No 3:- {Life cycle model}

water-fall model can be used to develop data processing application because it is well understood and nothing is not unknow.

(B) Prototying Model:-
Prototyping model is used for testing which is required after

little development because there is no previous experience.

C) V-model.

V model can be used when user wants to make changes in software on every step. So this model allow this.

Q No-4:-

[A] [Safety Critical System]

Safety-critical system are those systems whose failure could result in loss of life, property damage or damage to environment.

For Example:

Aircrafts, cars, weapon system and medical devices etc.

B) [Prototype]

A prototype is a basic working model, mock up or a simple simulation of the product.

For example:

If you design a software it's the basic thing how it show, work.

User-interface Prototyping:-

UI Prototyping is an iterative analysis techniques in which users are actively in the mocking up of the UI for a software system.

For Example:

The user interface of the Software hoe the software look.

C) {Fault}

It is a condition that causes the software to fail the performs its required functionalities.

For example:

Programmers uses wrong formulas.

Subject: Date:

{Error}

Refers to difference between Actual output and Expected output.

for example:

The incorrect statement excutes and values of the output would be wrong.

[D] {Effort, Time & cost}

Its important to keep the effort, time and cost in mind while designing a Software system effort means maximum tasks a Perform in less effor. Time should be minimum to perform a task. Cost of the software should be less in less operations.

⇒ Turn to out sourcing.
⇒ Document your requirments for custom software development.
⇒ Use agile Software for development approach.
⇒ Test your software etc.