

Cs605
Software engineering ii
All solved mcq

Formal Technical Reviews are of types except

1. Reviews
2. Walkthrough
- 3. JADS**
4. Inspections

When a software is delivered to a client and then client reports the bug in the software then that bug is termed as

1. Errors
- 2. Defects**
3. Mistake
4. Fault

Mean Time To Repair (MTTR) is the

1. All of the given options are .
2. Time when system remained unable for usage
- 3. Time taken to repair software**
4. Time taken to fix the error

A Software Requirement Specification (SRS) is traced if the of its requirements is clear.

1. Quality
2. Standard
- 3. Origin**
4. None of given

Question # 1 of 10 (Start time: 11:16:41 AM)

According to a Standish Group report, lack of is/are responsible for 13% of all project failures.

1. user out put
- 2. User input**
3. None of the given
4. CMM

Question # 2 of 10

A major issue in requirements engineering is the rate at which requirements change once the requirements phase has “officially”

1. Approved
2. Deleted
- 3. Ended**
4. None of the given

Question # 3 of 10

..... engineering does not simply create a modern equivalent of an older program, rather new user and technology requirements are integrated into the reengineering effort.

- 1. forward**
2. None of given
3. Reversed
4. BRP

Question # 4 of 10

Legacy system migration however is an easy task and there are a number of risks involved that need to be mitigated.

1. simple
2. Crucial

3. **None of given**

4. Easy

Question # 5 of 10

..... restructuring requires redesign with same function with higher quality than original program and data restructuring involves restructuring the database or the database schema.

1. document

2. **Code**

3. Database

4. Line

Question # 6 of 10

..... Managers look at the system from the angle that does the system and associated business process make an effective contribution to the business goal?

1. **senior**

2. IT

3. None of given

4. Line

Question # 7 of 10

Program is restructured the reverse engineering phase. In this case we modify source code and data in order to make it amenable to future changes.

1. **after**

2. None of given

3. Along with

4. Before

Question # 8 of 10

The code that the requirement has been designed, written, and unit tested.

1. Deleted
- 2. Implemented**
3. None of given
4. Approved

Question # 9 of 10

.....user assess the system from the perspective of how effective do they find the system in supporting their business processes and how much of the system functionality is used.

1. senior
2. IT
3. Line
- 4. End**

.....engineering requires application of SE principles, methods, and concepts to re-create an existing application.

1. reversed
- 2. Forward**
3. BRP
4. None of given

Question # 1 of 10 (Start time: 11:33:38 AM)

..... analysis is the first step in the reengineering process.

- 1. inventory**
2. Code
3. Database
4. Document

Question # 3 of 10 (Start time: 11:35:14 AM)

The software reengineering is a activity.

1. Code
2. Outdates
3. Document
4. **Non-trivial**

Question # 5 of 10 (Start time: 11:36:06 AM)

The goal of software development is to developsoftware on time and on budget, that meets customers' real needs.

1. standard
2. None of given
3. Functional
4. **Quality**

Question # 1 of 10 (Start time: 11:06:00 AM)

..... Engineering for software is a process for analyzing a program in an effort to create a representation of the program at a higher level of abstraction than the source code.

1. **Reverse**
2. Forward
3. BRP
4. None of given

Question # 9 of 10 (Start time: 11:15:29 AM)

The implemented requirement has beenthrough the selected approach, such as testing or inspection.

1. **verified**
2. Deleted

3. Approved
4. None of given

Question # 1 of 10 (Start time: 11:18:18 AM)

Weak documentation is a trademark of many applications.

1. **Legacy**
2. None of given
3. Reverse
4. Out dated

Question # 10 of 10

..... software development is itself risky as changes to one part of the system inevitably involve further changes to other components

1. forward
2. Reverse
3. Old
4. **New**

Question # 10 of 10 (Start time: 11:31:21 AM)

Requirement management is also one of the 5 KPA defined at CMM level.....

- 1
- **2**
- 3
- 4

The Review participants SHOULD NOT focus on

1. work product
2. Review agenda
3. Time lines
4. **Weaknesses of the developer**

Question # 2 of 10 (Start time: 02:34:37 PM)

Inspection and Walkthrough are types of Formal Technical Reviews

1. No
- 2. Yes**

Question # 3 of 10 (Start time: 02:35:23 PM)

Quality costs may be divided into costs associated with

- 1. prevention, appraisal, and failure**
2. customers, developers, and maintenance
3. people, process, and product
4. all of the given options are

Question # 4 of 10

Defect Removal Efficiency can be increased by

- 1. Identifying the defect in early stages of development so that it may not be amplified**
2. Identifying the defect in the later stages of project
3. By increasing the team member in a team
4. By performing the testing activity only

Question # 6 of 10

Following are the implicit requirement(s) of software?

1. Efficiency
- 2. All of the given options**
3. Ease of use
4. Maintainability

Question # 7 of 10

Review meeting is attended by the following EXCEPT

1. Review leader
2. All reviewers
- 3. CEO**
4. Product Producer

Question # 8 of 10

SQA is an umbrella activity in which following activities are performed EXCEPT

1. Review
2. Testing
- 3. Project Planning**
4. Inspection

Question # 9 of 10

If we have collected the historical data of our organization, this data related to errors can not be helpful in assessing the quality of the present project.

1. True
2. **False**

Question # 10 of 10

_____ gives the Mean time for which system remained available for use.

1. **MTTF**
2. MTBF
3. MTTR
4. MTTD

Question # 1 of 10

Following are effective guidelines for Review EXCEPT

1. We need to review the product not the producer
2. Be sensitive to personal egos
3. Errors should be pointed out gently
4. **Tone should be high and strict**

Question # 2 of 10

Review is a type of _____ that helps preventing the bugs to move in the next stage of software development

1. bug seeding tool
2. alarm
3. **filter # 99**
4. project planning activity

Question # 3 of 10

The higher the Error Index, the higher will be the Defect Removal Efficiency

1. **True**
2. False

Question # 5 of 10

Following are the benefits of conducting review EXCEPT

1. Helps in verifying the quality of product
2. Help in identifying where improvement is required.

3. Helps in identifying the bugs in the work product

4. Help in finding the size of the project

Question # 6 of 10

The goal of quality assurance is to provide management with the data needed to determine which software engineers are producing the most defects.

1. True

2. False

If an error related to requirements is identified in testing phase, so this error will be considered as an error of _____ phase.

1. Requirement

2. Design

3. Code

4. Testing

Question # 10 of 10 (Start time: 02:17:57 PM)

Usually the performance of a software organization change over-night.

1. True

2. False

Question # 1 of 10

Phase Index can be calculated by the help of the following formula, where • E_i – the total number of errors uncovered during the i th step in the SE process • S_i – number of serious errors • M_i – number of moderate errors • T_i – number of minor errors • PS_i – product size at the i th step • w_s, w_m, w_t – weighting factors for serious, moderate, and minor errors

1. $Pli = w_s(S_i/S) + w_m(M_i/M) + w_t(T_i/E)$

2. $Pli = w_s(S_i/E_i) + w_m(M_i/M_i) + w_t(T_i/E_i)$

3. $Pli = w_s(S_i/E_i) + w_m(M_i/M_i) + w_t(T_i/T)$

4. $Pli = w_s(S_i/E_i) + w_m(M_i/E_i) + w_t(T_i/E_i)$

Question # 5 of 10

People who performs software quality assurance must look at the software from the customer's perspective.

1. True

2. False

Question # 6 of 10

A key concept of quality control is that all work products. Choose the most appropriate answer.

1. are delivered on time and under budget
- 2. are thoroughly tested before delivery to the customer**
3. have complete documentation
4. have measurable specifications for process outputs

Question # 9 of 10

MTTF is the abbreviation of

1. Median time to failure
- 2. Mean time to failure**
3. Mean time to forward
4. Moderate time to failure

Until a mature software process has been achieved an organization would be wise to spend most of its efforts on which TQM step

1. observing the use of their products in the marketplace
- 2. developing a visible, repeatable, measurable process**
3. examining the ways in which customers use their products
4. optimizing the impact of intangibles on their current process

Quality is the compliance of software to implicit and explicit quality factors. Identify the explicit requirement from the following:

1. Ease of use
2. Efficiency
- 3. Compliance with CMMI**
4. Maintainability

While developing the software and before shipment to the client, if the bug is caught by th software team then it is termed as

- 1. Error**
2. Fault
3. Defect
4. Mistake

Defect Removal Efficiency can be increased by

- 1. Identifying the defect in early stages of development.**
2. Identifying defect in the later stages of project
3. By increasing the team members in team
4. By performing the testing activity

SQA is an activity in which testing is performed only

1. **True**
2. False

In order to measure the design quality, if the frequency of ripple defects is too large, then it means that there is tight coupling and hence the

- ▶ design is maintainable
- ▶ **design is not maintainable**
- ▶ design has completed
- ▶ none of the given

We can include following type of data in the database for creating matrix against each project except

- ▶ name of project
- ▶ size of project
- ▶ **company's CEO name**
- ▶ cost of project

Question No: 3

The only reason for an estimate to be unreliable is lack of experience related to the application on the part of the estimator.

- ▶ true
- ▶ **false**

A consideration of software scope must include an evaluation of all external interfaces.

- ▶ **true**
- ▶ false

Question No: 10

Reliability and Safety are same concepts with respect to software quality

- ▶ True
- ▶ **False**

Question No: 11

SCM is the requirement of the _____ level(s) of CMM

- ▶ First

- ▶ Second and later
- ▶ Third and later
- ▶ **Only Second**

Question No: 12

We can include following items during configuration item identification:

- ▶ User Manuals and Documentations
- ▶ Source Code
- ▶ Software Requirement Specifications
- ▶ **All of the given choices are**

Question No: 13

If a new version of a product is released by fixing the bugs in the previous release then it is termed as _____

- ▶ **Product Update**
- ▶ Product Upgrade
- ▶ Defect Removal
- ▶ Product Performance

Question No: 14

Every node signifies _____ version of a release

- ▶ **one**
- ▶ two
- ▶ three
- ▶ four

Question No: 15

The Change Control Authority does not have the rights to permit to bring the change in the software

- ▶ True
- ▶ **False**

Question No: 16

Check in and Check out is actually one and the same process with two different names

- ▶ True
- ▶ **False**

Question No: 17

There could be multiple GUIs to satisfy one requirement

- ▶ **True**
- ▶ False

Question No: 18

_____ is the process of Design recovery. At this stage the documentation of the overall functionality is created.

- ▶ Database Engineering
- ▶ **Reverse Engineering**
- ▶ Refactoring
- ▶ Forward Engineering

Question No: 19

In code restructuring, we do not change the functionality of the code

- ▶ **True**
- ▶ False

Question No: 20

In _____, new user and technology requirement can also be integrated into the re-engineering effort.

- ▶ Backward re-engineering
- ▶ **Forward re-engineering**
- ▶ Business Engineering
- ▶ Business Process Engineering

Question No: 21

A _____ process is “a set of logically related tasks performed to achieve a defined business outcome”.

- ▶ **Business**
- ▶ Software
- ▶ CMM
- ▶ ISO

Question No: 22

Software refactoring is a process in which

- ▶ **External behavior of the system does not change**
- ▶ Internal behavior of the system does not change
- ▶ Design of the software changes
- ▶ Architecture of the software changes

The formal methods model of software development makes use of mathematical methods to

- ▶ define the specification for computer-based systems
- ▶ **all of the given**
- ▶ develop defect free computer-based systems
- ▶ verify the correctness of computer-based systems

Which one of the following describes the data and control to be processed, function, performance, constraints, interfaces, and reliability?

- ▶ Product Quality
- ▶ **Software scope estimation**
- ▶ Resources requirements
- ▶ Time requirements

Question No: 26

The software plan is not a static document, it is frequently adjusted to make the project appear on track to meet all deadlines and quality targets.

- ▶ **True**
- ▶ False

Question No: 27

The projects are classified into following categories except

- ▶ New application development
- ▶ Reengineering projects
- ▶ Concept development projects
- ▶ **Marketing Development Projects**

Question No: 30

Reliability of a software is a

- ▶ functional requirement
- ▶ **non-functional requirement**
- ▶ Design Requirement
- ▶ None of the given

Question No: 1

_____ is a team organization where there is no permanent leader and task coordinators are appointed for short duration. Decisions on problems and approach are made by group consensus and communication among team is horizontal.

- ▶ **Democratic decentralized (DD)**
- ▶ Controlled decentralized (CD)
- ▶ Synchronous paradigm (SP)
- ▶ Controlled centralized (CC)

Question No: 2

Which of these software characteristics are used to determine the scope of a software project?

- ▶ context, lines of code, function
- ▶ context, function, communication requirements
- ▶ **information objectives, function, performance**
- ▶ communications requirements, performance, information objectives

Question No: 3

Function Point analysis is helpful in calculating the size of the software for _____

- ▶ Both client and software organization
- ▶ Software organization
- ▶ Client
- ▶ **User**

Question No: 4

The extent to which a program satisfies its specification and fulfills the customer's mission objectives is said to be achieving the

- ▶ Usability
- ▶ Efficiency
- ▶ Reliability
- ▶ **correctness**

When more than one user interpret the same requirement in different ways then we can say that the requirements are

- ▶ None of the given
- ▶ Incomplete
- ▶ In

▶ **Ambiguous**

Most recent data is more relevant while assessing the progress at a given point of time.

- ▶ True
- ▶ False

Question No: 8

Which statement is ?

- ▶ **The greater the dependency between the components the greater is coupling**
- ▶ The lesser the dependency between the components the greater is coupling
- ▶ The greater the dependency between the components the lesser is coupling
- ▶ None of the given

Question No: 19

Poka Yoke is Japanese term and it means

- ▶ **Mistake Proofing**
- ▶ Mistake Handling
- ▶ Mistake identification
- ▶ Mistake assurance

Question No: 20

Availability and Reliability are concerned with

- ▶ Perceived quality
- ▶ **Quantitatively measured quality**

Question No: 22

Which is not in the context of Poka-Yoke technique?

- ▶ Simple and cheap
- ▶ **Sophisticated and expensive**
- ▶ Part of Process
- ▶ Indication point should be near to the place where the problem occurred

Question No: 24

If Configuration item identification is not identified, it is possible to control changes and establish records.

- ▶ **False**
- ▶ True

Question No: 25

Incomplete Configuration identification documents may result in:

- ▶ Defective Product
- ▶ **Higher Maintenance Costs**
- ▶ Schedule Product
- ▶ all of the given choices are

Question No: 26

When an Item is baselined, it becomes frozen, here frozen means, that the item can be changed only by creating an old version

- ▶ True
- ▶ **False**

Question No: 27

The Evolution Graph signifies the

- ▶ version relationship
- ▶ baseline of a particular release
- ▶ change control activity
- ▶ **all of the given**

Question No: 29

Object un-lock is done by

- ▶ **check in**
- ▶ check out
- ▶ both check-in and check-out
- ▶ none of the given

Question No: 30

Requirements engineering is the basis of the contract between the developer and the client.

- ▶ **True**
- ▶ False

Question No: 31

Following are the components of a Legacy system except:

- ▶ business processes
- ▶ system hardware
- ▶ **marketing**
- ▶ application software

Question No: 32

Legacy system migration is usually hard. One important reason is that no proper documentation of the system is available

- ▶ **True**
- ▶ False

Question No: 33

While assessing a legacy system for further decision, one should decide the following about the supplier .

- ▶ Is supplier still in existence?
- ▶ Is supplier still in business?
- ▶ Is supplier can provide support?
- ▶ **All of the given**

Question No: 34

The application software is assessed on the basis of following factors except

- ▶ Documentation
- ▶ Understandability
- ▶ **Code Refactoring**
- ▶ Test data

Question No: 35

We modify the internal _____ in code re-structuring

- ▶ interface
- ▶ design
- ▶ **data structure**
- ▶ functionality

Question No: 37

“A method requires lot of information from some other class” is a symptom of _____ bad smell

- ▶ Data clumps
- ▶ Lazy class
- ▶ **Feature envy**
- ▶ Long Method

Question No: 38

_____ integrates system and software disciplines into single process improvement framework for introducing new disciplines as needs arise.

- ▶ SEI

- ▶ **CMMI**
- ▶ CMM
- ▶ ISO

Question No: 39

Level _____ is the lowest capability level of CMMI in Continuous representation

- ▶ 1
- ▶ **0**
- ▶ 5
- ▶ 6

Question No: 41

Although there are many different models developed by different researchers for estimation, all of them share which one of the following basic structure

- ▶ $E = 3.2 (KLOC)1.05$
- ▶ **$E = A + B * (ev)C$**
- ▶ $E = [LOC \times B0.333/P]3 \times (1/t4)$
- ▶ none of the given

Question No: 42

A _____ is a user recognizable subgroup of data elements within an ILF or EIF

- ▶ **Record element type (RET)**
- ▶ Data Element Type
- ▶ External Input
- ▶ External Query

Question No: 43

There are tools available in the market for project tracking. These tools can automatically track and manage the project replacing the need of any human being as a Project Manager.

- ▶ **True**
- ▶ False

Question No: 44

Any delay in _____ path makes the whole project delayed.

- ▶ Logical
- ▶ Neural
- ▶ Physical
- ▶ **Critical**

Question No: 45

The responsibilities of a Project Manager does not include

- ▶ Make a schedule of project
- ▶ Allocate tasks to the resources
- ▶ Monitoring the tasks
- ▶ **Allocate the resources to manage the HR and Accounts activities**

Question No: 46

.....subgroups are those that the user has the option of using one or none of the subgroups during an elementary process.

- ▶ **Optional**
- ▶ Mandatory
- ▶ None of the Given
- ▶ RET

Question No: 47

Process discipline is unlikely to be rigorous, but where it exists it may help to ensure that existing processes are maintained during times of stress and this is done at CMM level -----.

- ▶ 1
- ▶ 4
- ▶ 3
- ▶ **2**

Question No: 48

The processes at ----- is focus on continually improving process performance through both incremental and innovative technological changes/improvements.

- ▶ **Level 5**
- ▶ Level 1
- ▶ Level 4
- ▶ Level 3

Question No: 49

Quantitative process-improvement objectives for the organization are established, continually revised to reflect changing business objectives at -----.

- ▶ Level 3
- ▶ Level 2
- ▶ **Level 5**
- ▶ Level 1

Question No: 50

With a complex class you have to move data and methods around in small pieces to avoid errors, it seems slow but it is thebecause you avoid debugging

- ▶ **Quickest**
- ▶ Problem

- ▶ None of the given
 - ▶ Slowest
-

Since project estimates are not completely reliable, they can be ignored once a software development project begins.

A) True

B) False

The objective of software project planing is to

A) convince the customer that a project is feasible.

B) make use of historical project data.

C) enable a manager to make reasonable estimates of cost and schedule.

D) determine the probable profit margin prior to bidding on a project.

Project scope is defined as a means of bounding the system so that cost and schedule can be estimated effectively.

A) True

B) False

Software feasibility is based on which of the following

A) business and marketing concerns

B) scope, constraints, market

C) technology, finance, time, resources

D) technical prowess of the developers

The number of people required for a software project is determined

A) after an estimate of the development effort is made.

B) by the size of the project budget.

C) from an assessment of the technical complexity of the system.

D) all of the above

Reusable software components must be

A) catalogued for easy reference.

B) standardized for easy application.

C) validated for easy integration.

D) all of the above.

The software engineering environment (SEE) consists of which of the following?

A) customers

B) developers

C) hardware platforms

D) software tools

E) both c and d

The hardware required for most computer-based systems is more costly to purchase than the software.

A) True

B) False

Software project estimation techniques can be broadly classified under which of the following headings?

A) automated processes

B) decomposition techniques

- C) empirical models
- D) regression models

E) both b and c

The size estimate for a software product to be built must be based on a direct measure like LOC.

- A) True
- B) False**

Problem-based estimation is based on problem decomposition which focuses on

- A) information domain values
- B) project schedule
- C) software functions
- D) process activities
- E) both a and c**

LOC-based estimation techniques require problem decomposition based on

- A) information domain values
- B) project schedule
- C) software functions**
- D) process activities

FP-based estimation techniques require problem decomposition based on

- A) information domain values**
- B) project schedule
- C) software functions
- D) process activities

Process-based estimation techniques require problem decomposition based on

- A) information domain values
- B) project schedule
- C) software functions
- D) process activities, actions and/or tasks
- E) both c and d**

Unlike a LOC or function point each person's "use-case" is exactly the same size.

- A) True
- B) False**

When agreement between estimates is poor the cause may often be traced to inadequately defined project scope or inappropriate productivity data.

- A) True**
- B) False

Empirical estimation models are typically based on

- A) expert judgement based on past project experiences
- B) refinement of expected value estimation
- C) regression models derived from historical project data**
- D) trial and error determination of the parameters and coefficients

COCOMO II is an example of a suite of modern empirical estimation models that require sizing information expressed as:

- A) function points
- B) lines of code
- C) object points
- D) any of the above**

Putnam's software equation is a dynamic empirical model that has two independent parameters: a size estimate and an indication of project duration in calendar months or years.

- A) True**

B) False

Function points are of no use in developing estimates for object-oriented software.

A) True

B) False

In agile software development estimation techniques focus on the time required to complete each

A) increment

B) function

C) task

D) all of the above

It is possible to use a modified function point technique to develop estimates for Web applications.

A) True

B) False

Using a statistical technique like decision tree analysis can provide some assistance in sorting out the true costs associated with the make-buy decision.

A) True

B) False

Outsourcing always provides a simple means of acquiring software at lower cost than onsite development of the same product.

A) True

B) False