ESOF QUESTIONS

O que se aprendeu nesta cadeira?

a) O desvio padrão dos atrasos do Flores
b) Como perder tempo num semestre
c) A velocidade com que uma sala teórica se vai esvaziando em 3 semanas
d) Que esta folha adiantou de crlh...
e) Todos acima

Quanto tempo demora o Flores a chegar à aula?
a) 1h
b) 1 semana e meia
c) 30 mins
d) 20 mins, que incrementam pra depois ir lanchar, 5 mins depois de ter chegado.

T04GH
The Rational Unified Process (RUP):
   a) is recursive.
   b) doesn't resort to UML.
   c) has 4 phases: Inception, Elaboration, Construction and Transition. (CORRECT)
   d) when testing, tests the system in its entirety.

Extreme Programming (XP) is known for:
   a) having a high risk.
   b) be appropriate for large teams with over 20 elements.
   c) having a fix planning.
   d) having a flexible scaling. (CORRECT)

It's considered using XP when:
   a) it's necessary the use of brute force and not teamwork.
   b) the requirements are vague and/or inaccurate. (CORRECT)
   c) there is a long development schedule.
   d) the teams are very large.

Agile Development should:
   a) deliver frequent new versions for evaluation. (CORRECT)
   b) document the code very well, as it is the main focus.

c) not focus on developing tool support.

d) not focus on rapid development.

Model-driven engineering:

a) is an old method and it had a big impact on software engineering practice.

b) allows to consider systems at a higher level of abstraction. (CORRECT)

c) it doesn't allow to generate programs automatically.

d) the programs are the principal output of the development process.

Program testing:

a) reveals the absence of errors.

b) uses real data to test software.

c) serves to demonstrate to the developer and the costumer that the software meets its requirements. (CORRECT)

d) is part of a specific verification.

T04GE

Which one is the first step of the waterfall model?

- System and Software design
- Implementation and Unit Testing
- Operation maintenance
- Requirements analysis and definition

What does test automation mean?

- That the code is all covered by tests.
- That the tests are ran automatically. X
- That the tests are made before the task is implemented. (true for test-driven development)
- That the test are made during the development of the test.

Which type of testing involves the users in this task?

- Alpha Testing
- Beta Testing
- Acceptance Testing
- Omega Testing

What are the roles in Scrum?

- Product Owner,Scrum Master and Team.x
- Product Owner,Team Leader and Team.
- Client, Scrum Master and Team.
- Company Owner,Scrum Master and Users.

What must be done when a project has a delay?

- Hire more people
- Ask for more time.x
- Ask for more money.
- Deliver the project unfinished.

What is the order of a open source developer career path?
- User, Contributor, Committer, PMC Member, PMC Leader, Foundation Member.x
- User, Contributor, Committer, Foundation Member, PMC Member, PMC Leader.
- User, Committer, Contributor, Foundation Member, PMC Member, PMC Leader.
- Committer, Contributor, PMC Member, PMC Leader, Foundation Member, User.

Older systems that rely on languages and technology that are no longer used for new systems are called:
1. old systems.
2. legacy systems.x
3. dead systems.
4. outdated systems.

What is the lean software development focus?
1. Optimizing efficiency and minimizing waste in the development of software.x
2. Be more flexible and less iterative.
3. Managing iterative development rather than specific agile practices.
4. Using agile methods for developing large software systems that a small team cannot develop.

How many phases are in Scrum development?
1. 4
2. 3x
3. 2
4. 1

Rational Unified Process starts with _____ and ends with ___.
1. Elaboration, Construction
2. Inception, Elaboration
3. Inception, Transition x
4. Construction, Transition

XP **is not**:
1. heavyweight. x
2. efficient.
3. flexible.
4. low-risk.

Software evolution processes **don't** depend on
1. The type of software being maintained.
2. The development processes used.
3. The skills and experience of the people involved.
4. The number of tests used in the development phase.x

Which one of the following statements **is not** a feature of the RUP?
[   ] Sustained in UML
[   ] Iterative and incremental
[   ] Driven by use cases
[*] Promotes an initial definition of a basic software architecture

Which one of the following statements **is not** a benefit of test-driven development?
[   ] Code coverage
[   ] Regression testing
[   ] Simplified debugging
[*] Continuous Tweaking

In Test-driven development, the developer should:
        ( ) First, write all the tests, then all the code;
        ( ) First, all the Code, then all the tests;
        (x) Write some tests, then some code and repeat
        ( ) Write some code, then some tests and repeat

Which of these practices do not apply to XP Programming:
        ( ) Pair Programing;
        ( ) Refactoring;
        ( ) Testing;
        (X) Large Releases.

T05GG

1. Who was the responsible for the creation of "open source" ?
a) **Eric S. Raymond**
b) Dr. Winston W. Royce
c) Hirotaka Takeuchi
d) Ikujiro Nonaka

2.Which of the following options is a disadvantage of the "open source" method?
a) **There may also be less support available for when things go wrong**
b) Poor model for long and ongoing projects
c) Non-adaptive Design Constraints
d) Ignores Mid-Process User/Client Feedback

3.Which of the following options is an advantage of the waterfall method?
a) **Phases are processed and completed one at a time**
b) Transparency and Security
c) It's a good model for complex and object-oriented projects
d) Good model for long and ongoing projects

4.Waterfall model was introduced by Dr. Winston W. Royce in a paper. When was it published?
a) **1970**
b) 1980
c) 1975
d) 1985

5.What is the last phase of the waterfall model?
a) **Maintenance**
b) Testing
c) Design
d) Requirements

6.What is the best order and the one that best follows the "Waterfall" model?
a) **Requirements, analysis, design, construction, testing, deployment and maintenance**
b) Requirements, analysis, construction, design, testing, deployment and maintenance
c) Requirements, analysis, construction, design, testing, deployment and maintenance
d) Requirements, analysis, design, testing, construction, deployment and maintenance

T05GD

Which of the following corresponds to two agile methods?
a) Extreme Programming and Waterfall.
b) V-Model and Scrum.
c) Scrum and Extreme Programming. (**CORRECT**)
d) Waterfall and Rational Unified Process.

Complete the sentence in order to make it true. "In pair programming...
a) Each programmer works on a separate part of the project."
b) Programmers sit together at the same computer to develop the software." (CORRECT)
c) Discourages refactoring."
d) Doesn't spread knowledge across the team."

Regarding general testing guidelines, which of the following is FALSE?
a) Force invalid outputs to be generated.
b) Force computation results to be too large or too small.
c) Choose inputs that force the system to generate all error messages.
d) Repeat each input or series of inputs only once. (CORRECT)

Which of the following does NOT correspond to two reengineering process activities?
a) Reverse engineering and Data reengineering.
b) Program structure improvement and Pair Programming. (CORRECT)
c) Program modularisation and Reverse engineering.
d) Source code translation and Program structure improvement.

Regarding architectural patterns, which of the following is FALSE?
a) An architectural pattern is a stylized description of good design practice, which is still a prototype. (CORRECT)
b) Patterns may be represented using tabular and graphical descriptions.
c) Patterns are a means of representing, sharing and reusing knowledge.
d) Patterns should include information about when they are and when the are not useful.

Regarding maintenance costs, which of the following is TRUE?
a) Only affected by technical factors.
b) Decreases as software is maintained.
c) Ageing software never has high support costs.
d) Usually greater than development costs (2* to 100* depending on the application). (CORRECT)

T01GC

1. The Rational Unified Process (RUP) has four life-cycle phases. Which one of the following is <u>not</u> a life-cycle phase?
   a. Inception
   b. Elaboration
   c. Construction
   d. End-of-life
2. Which are the four phases in the Spiral development process?
   a. Specification, Implementation, Validation, Operation
   b. Specification, Operation, Sprint, Validation
   c. Validation, Backlog Grooming, Sprint, Operation
   d. Implementation, Validation, Operation, End-of-life
3. Which one of the following is <u>not</u> an agile development process?
   a. Kanban
   b. Scrum
   c. Waterfall
   d. Extreme programming (XP)
4. Which of the following is a disadvantage of the Waterfall Model of Software Development?
   a. Hard to manage
   b. It doesn't place enough emphasis on documentation
   c. No working software is produced in its early stages
   d. Lack of clear and well defined goals
5. The iterative model should be used when
   a. There is a need for a working software in the early stages of development
   b. The project requirements are well defined
   c. There is a large development team
   d. The project is used in critical systems.
6. Which of the following is <u>not</u> an element that's usually present in a legacy system?
   a. Support software
   b. System hardware
   c. Modular code and unit tests
   d. Application Data

T01GE

1. What is a committer?
   a. **Someone who is able to modify the source code of a particular piece of open-source software.**
   b. Someone who clones and modifies different open-source projects.
   c. Someone who forks open-source projects.
   d. Someone who makes frequent pull requests for a community.

2. What is one of the three most common ways to become a committer?
   a. Star and watch the project.
   b. Fork the project.
   c. Create pull requests for the community.
   d. **Be appointed by one of the original developers.**

3. Which of the following is NOT a free software license?
   a. GNU General Public License (GNU GPL)
   b. **Debian Free Software Guidelines (DFSG)**
   c. Microsoft Public License (Ms-PL)
   d. Apple Public Source License

4. Which of the following statements about software maintenance is **not** true?
   a. The term is mostly used for changing customer software, because generic software products are described to evolve to create new versions instead.
   b. Most of the time in software maintenance is used for functionality addition or modification.
   c. **The cost of software maintenance is relevant, but still a lot lower than the development cost.**
   d. Software maintenance often corrupts the software leading to increasingly difficult maintenance.

5. Which of the following is NOT part of the risk management process?
   a. **Risk executing**
   b. Risk monitoring
   c. Risk identification
   d. Risk planning

6. Which of the following statements about software reengineering is true?
   a. A reengineered software should try to copy the structure and documentation of its original as precisely as possible.
   b. **Software reengineering is defined as the rewriting or restructuring of legacy systems, without changing its functionality.**

c. The cost of reengineering is almost always higher than the cost of developing new software.

d. The risk of reengineering is exceptionally high and it should therefore only be done in few cases.

T01GF

1. How much time should the Sprint of Scrum take ?
a) **1-4 weeks**
b) 1-10 weeks
c) 1-4 days
d) 1-4 months

2. What factor influences project management ?
a) Company Size
b) Software Size
c) Software Type
d) **All of the above**

3. A Staff turnover risk consists in:
a) There will be a change of organizational management with different priorities.
b) **Experienced staff will leave the project before it is finished.**
c) There will be a larger number of changes to the requirements than anticipated.
d) None of the above

4. What is the best order and the one that best follows the Risk management process ?
a) Risk identification, Risk planning,Risk analysis, Risk monitoring
b) Risk identification, Risk requirements, Risk monitoring, Risk Solving
c) **Risk identification, Risk analysis,Risk planning, Risk monitoring**
d) Risk analysis, Risk planning, Risk monitoring, Risk presentation

5. Who is considered the inventor of Team Software Process?
a) Corwin Leaks
b) Dwain Channing
c) Jeff Sutherland
d) **Watts Humphrey**

6. A Technology change risk affects:
a) Product.
b) Project
c) All of the above.
d) **None of the above**

Which one of this is not a decision factor of Agile and Plan-Driven
- Dynamism
- Personnel
- Criticality
- **Transition**

The stages of testing are
- General testing, system testing, and acceptance testing
- Component testing, system testing, and individual testing
- **Component testing, system testing, and acceptance testing**
- General testing, system testing, and individual testing

Which one of this is not a waterfall model phase
- System and software design
- **Iterative approach**
- Integration and system testing
- Requirements analysis and definition

Which one of this is not an agile characteristic

- Focus on the code rather than the design
- Based on an iterative approach to software development
- **Separate and distinct phases of specification and development.**
- Intended to deliver working software quickly and evolve this quickly to meet changing requirements.

Which one is the factor that doesn't influence project management?
- Company Size
- **Developers' Hardware**
- Software type
- Organizational Culture

Which is the "Waterfall" of implementations steps to develop a large computer program for deliver to a customer?
- Software Requirements, System Requirements, Analysis, Program Design, Testing, Coding, Operations
- Analysis, System Requirements, Software Requirements, Program Design, Coding, Testing, Operations
- **System Requirements, Software Requirements, Analysis, Program Design, Coding, Testing, Operations.**
- Analysis, Program Design, System Requirements, Software Requirements, Testing, Coding, Operations

Na turma do Ademar foi nos pedido para fazer perguntas de resposta aberta sobre Software process models

1 - Why doesn't the waterfall method cope well with requirement changes?

2 - What advantages does the incremental development has over the waterfall method?

3 - Loss of control over evolution of reused system elements is a disadvantage of Integration and Configuration. True or False? Justify.

In what consists continuous integration in XP processes?

What's the main role of software specification?

What are the main goals of the software's testing step and how does skipping them affect the overall project?

T01GH

Which of the following is <u>not</u> considered a view of a system's architecture?
A. ( ) Logical view
B. ( ) Physical view
C. ( ) Process view
D. (X) User view

What are the four pattern elements?
A. (X) Name, problem description, solution description, consequences.
B. ( ) Name, problem description, solution description, requirements.
C. ( ) Problem description, solution description, requirements, consequences.
D. ( ) Name, solution description, requirements, consequences.

Which of the following is <u>not</u> considered a level of reuse?
1. ( ) Abstraction level
2. ( ) Object level
3. (X) Function level
4. ( ) System Level

Which type of software maintenance requires the most effort?
1. ( ) Fault repair
2. ( ) Environmental adaptation
3. (X) Functionality addition and modification
4. ( ) None of the above

According to the Mythical Man-Month, which characteristic might lead to poor scheduling?
A. ( ) Pessimism
B. ( ) Courage
C. (X) Optimism
D. ( ) Versatility

Which of the following goes <u>against</u> Extreme Programming?
A. ( ) A simple solution is always appreciated, even if we pay the costs to change it in the future.
B. (X) Testing should be made only when it is absolutely necessary. (Explanation: All developments must be tested to avoid failures)
C. ( ) Refactoring should be implemented as soon as it becomes necessary.
D. ( ) A developer work time should be no more than 40 hours per week

T04GB

Agile development methods emerged in the late 1990s whose aim was to:
( ) slowly reduce the delivery time for working software systems.
( ) slowly extend the delivery time for working software systems.
(X) radically reduce the delivery time for working software systems.
( ) radically extend the delivery time for working software systems.

User testing is essential:
(X) even when comprehensive system and release testing have been carried out.
( ) only when comprehensive system and release testing have not been carried out.
( ) but not when comprehensive system and release testing have been carried out.
( ) but not when comprehensive system and release testing have not been carried out.

The Spiral model is a risk-driven process model generator for software projects, and one of its advantages is:
( ) Requirements can be captured more accurately and the end of the process is known early.
(X) Development can be divided into smaller parts and the risky parts can be developed earlier which helps in better risk management.
( ) The whole success of the process is highly dependent on risk analysis.
( ) It's a simple process, suitable for small and low risk projects.

Which model is best suited when requirements do not have high probabilities to change and are easily understandable?
( ) Spiral
( ) Prototyping
( ) Unified Process
(X) Waterfall

What is the aim of agile methods?
(X) Reduce overheads in the software process.
( ) Debug properly.
( ) Test your code in a most efficient way.
( ) Structure your code.

What's code validation?
( ) Changing the system in response to changing customer needs.
( ) defining what the system should do.
(X) Checking that it does what the customer wants.
( ) Define the organization of the system.

T03GD (Scrum + Xp + Rup)

The possible roles used in the Scrum methodology are:

- The Customer, Scrum coach, Scrum team
- Product owner, Scrum master, Scrum team
- Tester, Scrum coach, The Developer
- Programer, Scrum master, Product owner

According to the Scrum workflow:

- The sprint planning meeting must happen twice, once without the stakeholders and another with all the intervenients
- There are two defined artifacts that result from a sprint planning meeting: A sprint goal and a sprint backlog.
- A sprint goal is a short description of what a team has achieved during the last sprint.
- The product backlog is a list of the sprint backlog items

What are the values of XP?

- Communication, feedback, simplicity, respect
- Communication, simplicity, feedback, courage, respect
- Focus, feedback, courage, respect
- Openness, Commitment, simplicity, Communication, respect

Which of the following is true about Extreme Programming?

- The team works in pairs in different machines, both of the elements are writing code
- The team works in pairs and both can write code and they can switch positions.
- In Extreme Programing, there is no unit testing.
- In Extreme Programing, the code is written before the unit tests are developed

In the Rational Unified Process (RUP)

- The work products of a task consist solely of the application changes done to the products
- The RUP hump chart describes how the RUP phases and disciplines evolve over time
- Test Business Intelligence and Deployment are some of the nine categories in which the RUP tasks can be classified
- RUP represents an improvement on the overall design of the waterfall model

What is true for the RUP four life-cycle phases

- At the Inception phase, among other things, the expected revenue of the product is defined
- The elaboration phase is used to define a list of uses cases while the Transition phase produces a business case
- The construction phase is characterized by a cycle of software producing and must pass the life-cycle architecture milestone
- The Transition phase works as a transition between the elaboration phase and the construction phase

T03GG (Scrum + Xp + Rup)

Should you ever use Waterfall over SCRUM/other Agile methods?

- No, Waterfall is too rigid and other methods are more modern and adaptative;
- Yes, when dealing with older technologies and frameworks since they're contemporary of Waterfall and therefore work better together;
- Yes, if the requirements are simple, predictable, well defined, understood and immutable;
- Yes, if the requirements won't change and the project is small.

The RUP methodology is:

- Customer driven and team centric;
- Use case driven and architecture centric;
- Based on reusability and centered on customers;
- Documentation based and use case driven;

Which of the following is <u>not</u> a characteristic of SCRUM Model?

- Stable requirements. X
- Incremental development.
- Agile nature.
- Time-boxed scheduling.

Which of the following is <u>not</u> an Extreme Programming practice?

- Complex design.
- Metaphor.
- Refactoring.
- Coding Standards.

Which of the following methodologies use *sprints*?

- Rational Unified Process (RUP).
- Agile/SCRUM.
- Extreme Programming (XP).
- RUP and SCRUM.

Consider the following statements and choose the correct option:

I. Fast feedback is one of the XP 'Principles'.
II. RUP is iterative and incremental.

- Only the statement **I.** is true.
- Both statements are false.
- Both statements are true.
- Only the statement **I.** is false.

T03GB

According to Scrum terminology Scrum is:
- A development iteration which is usually 2-4 weeks long.
- An estimate of how much product backlog effort that a team can cover in a single sprint.

- **A daily meeting of the team that reviews progress and prioritizes work to be done that day.**
- A person whose role is to protect the development team from external distractions.

According to Scrum terminology Scrum Master is:
- **A person who is responsible for ensuring that the Scrum process is followed and guides the team in the effective use of Scrum. He or she is responsible for interfacing with the rest of the company and for ensuring that the Scrum team is not diverted by outside interference.**
- A person whose job is to identify product features or requirements, prioritize these for development and continuously review the product backlog to ensure that the project continues to meet critical business needs.
- A person, who arranges daily meetings, tracks the backlog of work to be done, records decisions, measures progress against the backlog and is responsible for communication between members of team.
- A Scrum term for project manager.

XP is the right methodology for:
- **Small/Medium Teams**
- Large Teams
- Hard to test systems
- Projects with very static requirements

Which one of the following practices is NOT promoted by XP:
- Pair Programming
- **Large Releases**
- 40-hour Week
- Simple Design

In RUP what model is used in the Requirement Capture phase?:
- Design model
- **Use case model**
- Test model
- Analysis Model

In RUP during the testing phase who is responsible for Evaluating tests?:
- **Test Designer**
- Performance Tester
- System Test
- Integration Test

T04GD

Pergunta 1

What is the difference between traditional methods and agile methods?
   a) Traditional methods encourages the team to have regular checkpoints.
   b) Traditional methods allows the team members to experiment other alternatives.
   c) I don't know.
   d) Agile methods allow more flexibility than traditional methods
   e) All above.

Answer: d)

Pergunta 2

What are the main principles of Lean Software Development(LSD)?
   a) I don't know.
   b) Eliminate Waste, Optimize the Project and Create Knowledge.
   c) Respect People and Demand the teams do more they are capable of.
   d) Eliminate Waste, Build in Quantity and Quick Deliver.
   e) None above.

Answer: b)

Pergunta 3

What are the main values of Extreme Programming(XP)?
   a) All below.
   b) Encouraging communication and create complex projects.
   c) Different feedback levels and simple projects.
   d) Communication based on pair programming and feedback lacking unit testings.
   e) I don't know.

Answer: c)

Pergunta 4

Which of those are Structural design patterns?
   a) Decorator and Flyweight.
   b) Facade and Bridge.
   c) All of them
   d) I don't know.
   e) Front Controller and Proxy.

Answer: c)

Pergunta 5

Which one of these answers is true related to Open Source Development?
   a) It's an approach in which volunteers are invited to participate in the development.
   b) All projects, after the development process, are free.
   c) An interested user has to change code in order to contribute.
   d) I don't know.
   e) None of them

Answer: a)

Pergunta 6

What are the implement steps of Waterfall?
   a) Initialization, Planning, Requirements, Design, Implementation, Deployment.
    b) System Requirements, Sofware Requirements, Analysis, Program Design, Coding, Testing and Operations.
   c) Operate and maintain the system, analyse user requirements, design the program, code the program, document and test the system.
   d) I don't know.
   e) None of them

Answer: b)

Scrum is a framework for managing:
A. Software Development.
B. Hardware Development.
C. Operating Systems Development.
D. Android Development.

The work is broken into actions that can be completed within fixed duration cycles called:
A. backlogs.
B. sprints.
C. burndown charts.
D. refinments.

Two of the V-Model development process techniques are:
A. Testing and Analysis.
B. Testing and Retry.
C. Frameworking and Analysis.
D. Inspection and SpeedProgramming.

One of the characteristics that distinguishes Scrum from other development processes: C
A. Testing.
B. Outside work.
C. Daily Scrum.
D. Not being able to cancel sprints.

One of Scrum's limitations is:
A. Teams whose members have very general skills.
B. Projects with few external dependencies.
C. Products with no regulated quality control.
D. Teams whose members are geographically dispersed or part-time.

The V model contains 3 sequential key goals, inscribed in the left, middle bottom and right.
From left to right, they are:
A. Project Definition, Implementation, Project Test and Integration.
B. Project Test and Integration, Time, Project Definition.
C. Implementation, Project Definition, Project Test and Integration.
D. Project Definition, Implementation, Deliver to stakeholder.

T01GI

1 - Is the ransomware attack, "WannaCry", a software failure ?
   a) True
   b) False **X**

2 - The Mythical Man Month excerpt talks about an idea that the more man power you add to a project the less time it takes to do independently of the complexity of the project.
   a)   - True - **X**
   b)   - False

3 - Which is the software process that has development cycle between 1-4 weeks:
   a) - Scrum **X**
   b) - Extreme Programming
   c) - Waterfall
   d) - Rational Unified Process

4 - Which are the correct People Management Factors
   a) Consistency, Respect, Inclusion, Honesty **X**
   b) Cooperation, Honesty, Time-Focus, Inclusion
   c) Consistency, Friendship, Craftmanship, Honor
   d) Consistency, Inclusion, Cooperation, Respect

5 - From the list below, which option includes 3 "code smells":
   a) Long Methods, Symbolic Constants, Data Clumping
   b) Long Methods, Modularity, Unit Testing
   c) Duplicate Code, Data Clumping, Speculative Generality **X**
   d) Speculative Generality, Portability, Long Methods

6 - Choose among the next software process which are agile.

    a) Waterfall
    b) Scrum **X**
    c) Unified Process **X**
    d) Crystal Method **X**
    e) Extreme Programming **X**

X - Correct Answer

T02GA

1 - In RUP, which objective does pertain to the Inception phase?

    a) Identification of actors and cases of use and description of the most significant. **X**
    b) Replacing product while maintaining its framework.
    c) Iterative and incremental development of the complete product.
    d) Analysis of the problem's domain.

2 - Who is responsible for prioritizing the product backlog in Agile?

    a) Product Owner. **X**
    b) Product Manager.
    c) Lead Developer.
    d) Tester.

3 - Which of the following is the right activity sequence for XP?

    a) Write code,write test, refactor
    b) Write code, refactor, write test
    c) Write test, write code, refactor **X**
    d) Design, write code,Write test

4 - Which Practice prescribe "the code is always written by two programmers at one machine" ?

    a) Twin Programming
    b) Peer Programming
    c) Pair Programming **X**
    d) Buddy Programming

5 - When does a RUP iterative lifecycle enable user/customers to participate in the development process?

   a) Only at the beginning and at the end of the schedule.
   b) In potentially every iteration, to review releases and provide input. **X**
   c) When documentation must be generated.
   d) Only at major milestones.

6 - Which is an objective of Testing in RUP?

   a) Build the system, producing all the code required to create the executable system.
   b) Get an agreement between the end users and developers, on the description of what the system should do.
   c) Show how the system will be built in order to meet all the requirements, tasks and described in the use case templates
   d) Verifying the system in it's own totality. **X**

T2G0E

1 - Which planning cycle is part of XP 'Practices'?
   a)Monthly
   b)Quarterly **X**
   c)Half Yearly
   d)Yearly

2- How is Product Backlog Arranged?
   a)Items are randomly arranged
   b)Large items at the top, small items at the bottom
   c)Into categories, P1, P2, P3 etc
   d)Most important items at the top, least important items at the bottom **X**

3-What is the main goal of RUP?
   a)To prevent resources from being waste **X**
   b)To minimize development time frame
   c)To create high quality software
   d)To increase development costs.

4- How many development phases does RUP have?
   a) Four **X**
   b) Five
   c) Six
   d) Ten

5-Which of the following is the right activity sequence for XP?

a) write code, write test, refactor
b) write code, refactor, write test
c) write test, write code, refactor **X**
d) write code, write test, design

6- Which one of the following is not a Scrum role?
a) Product Owner
b) Scrum Master
c) Product Manager **X**
d) Team

Which one of these concepts are taken to an extreme level in XP software development methodology ?

1- test procedures before the software has been written and integrated with the hardware.
2- Writing automated tests which validate the operation of even small sections of software coding, rather than only testing the larger features.
3- Code simplicity and clarity;
4- Applying a flat management structure;

A: 1 and 2
B: 2 and 3
C: Only 1
D: Only 4

Which one of these is a main value in XP software development methodology ?

A: Feedback
B: Commitment
C: Openness
D: Interaction with users

About Scrum:

Which one of this is **not** a role in Scrum?

A: Product Owner
B: Scrum Master
C: Delivery Team
D: Business Analyst

Which one of the following main events is **not** defined by Scrum?

A:Mid-Sprint Status Review Meeting
B:Retrospective Meeting
C:Review Meeting
D Daily Meeting

About RUP.

Which one of this is not a RUP phase?

A:Elaboration
B:Inception
C:Optimization
D:Transition

RUP's design has the objective of:

A:integrate three specific process-improvement models: software, systems engineering, and integrated product development.
B:Show how the system will be built, to satisfy all the requirements, tasks and described functions on the use-case models.
C:show what are the most important features that apply to the system.
D: lower the cost of change.

T05GA

Which of these is not a main principle of the Unified Process:
- Iterative and incremental
- Architecture-centric
- Risk-focused
- Easy access to expert users

A disadvantage of the Unified Process:
- This methodology emphasizes on accurate documentation
- It is proactively able to resolve the project risks that are associated with the clients evolving requirements for careful changes and request management
- Very less need for integration as the process of integration goes on throughout the development process
- The development process in this methodology is very complex and not exactly organized.

What is the most important thing in Cristal Method:
- People
- Talents
- Communications
- Skills

Which of these is not a main principle of the Cristal Method:
- Frequent delivery
- Reflective improvement
- Osmotic communication
- Risk-focused

Validation testing is characterized for being used to:
- Discover faults in the software where its behaviour is not in conformance with its specification
- Demonstrate that the software meets its requirements
- Test the functionality of objects or methods
- Get the most performance

A urgent change request shouldn't be implemented if :
- a serious system fault has to be repaired to allow normal operation to continue
- Changes to system's environment have unexpected events
- There are business changes that requires a very rapid response
- If the team has problems in the making of the project

T6GE

Suppose you're an XP'er working on a small project. The main reason why you shouldn't be afraid to make changes in the code is:
* unit tests ensure the code is good.
· the other team members are constantly looking at your changes.
· if the main program doesn't break, then it's all ok.
· The client will review the whole code before purchase.

How should user requirements be expressed in an XP development context?
* Written/drawn user stories or scenarios.
· extensive reports on how the program should handle every situation.
· spoken description.

In a scrum sprint, how should a member of a scrum team reach the customer?
* Through the Scrum Master.
· Directly reach the client.
· Talk to a scrum peer, and only then reach the customer directly.
· The team should rely solely on the specification provided, and not contact the customer until the product is finished.

What do you mean by pair programming?
* Programmers sitting together at the same computer to develop the software.
· Programmers from different parts of the world join on skype to discuss and produce code.
· Asking a peer for a review on the produced code.
· Programming using two monitors.

T3GC

1 - Which of these statements about the development stages of RUP is correct?

   a) Cycles are divided into Iterations, which are then divided into Phases;
-> b) Cycles are divided into Phases, which are then divided into Iterations;
   c) Phases are divided into Cycles, which are then divided into Iterations;
   d) Phases are divided into Iterations, which are then divided into Cycles.

2 - Between RUP and XP, which one(s) of them explicitly state that Pair Programming should be employed during their development stages?

   a) None of them;
   b) Both of them;
   c) RUP;

-> d) XP.

3 - What should be tested during the testing stages of RUP?

a) The system as a whole only;
b) Each use case only;
-> c) First the use cases and then the whole system;
d) First the whole system and then the use cases.

4 - How many members does a Scrum team usually have?

a) 1-3;
-> b) 3-7;
c) 7-12;
d) 12-15.

5 - In XP, coding standards must be stipulated by the team in order to facilitate certain elements of the development process. Which element of the ones below does not take advantage of such standards?

a) Collective code ownership;
-> b) Continuous integration;
c) Pair programming;
d) Refactoring.

6 - In XP, which of these design practices should not be adopted?

-> a) Make the code easily extendable for any possible future functionalities;
b) Use the least possible number of methods and classes;
c) Code should be added when needed, and not before or after;
d) There should be no repeated logic.