

FINALTERM EXAMINATION
Fall 2008
CS605- Software EngineeringII (Session - 1)

Ref No: 324799

Time: 120 min

Marks: 70

Student Info	
StudentID:	
Center:	OPKST
ExamDate:	2/8/2009 12:00:00 AM

For Teacher's Use Only									
Q No.	1	2	3	4	5	6	7	8	Total
Marks									
Q No.	9	10	11	12	13	14	15	16	
Marks									
Q No.	17	18	19	20	21	22	23	24	
Marks									
Q No.	25	26	27	28	29	30	31		
Marks									

Question No: 1 (Marks: 1) - Please choose one

The purpose of earned value analysis is to

- ☐ determine how to compensate developers based on their productivity
- ☐ provide a quantitative means of assessing software project progress
- ☐ provide a qualitative means of assessing software project progress
- ☐ set the price point for a software product based on development effort

Question No: 2 (Marks: 1) - Please choose one

The RMMM plan assists the project team in developing strategy for dealing with risk. In this context, an effective strategy must consider:

- ☐ Risk avoidance
- ☐ Risk monitoring
- ☐ Risk management and contingency plan
- ☐ All of the given choices

Question No: 3 (Marks: 1) - Please choose one

The component-based development model is

- ☐ only appropriate for computer hardware design.

? not able to support the development of reusable components.

? dependent on object technologies for support.

? not cost effective by known quantifiable software metrics.

Question No: 4 (Marks: 1) - Please choose one

In _____ representation of CMMI model, consideration is given to improve all the defined processes areas.

? Staged

? Continuous

Question No: 5 (Marks: 1) - Please choose one

If you know the relationship between the use cases, classes, GUIs, Test cases and other artifacts then we can say that requirements are traceable in that project.

? True

? False

Question No: 6 (Marks: 1) - Please choose one

There could be multiple GUIs to satisfy one requirement

? True

? False

Question No: 7 (Marks: 1) - Please choose one

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

? True

? False

Question No: 8 (Marks: 1) - Please choose one

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: 9 (Marks: 1) - Please choose one

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: 10 (Marks: 1) - Please choose one

Configuration Item identification involves:

? Identifying the structure of the s/w system

? Uniquely identify individual components

? Uniquely identifying various revisions

? All of the given

Question No: 11 (Marks: 1) - Please choose one

Incomplete Configuration identification documents may result in:

? Schedule Product

? all of the given choices are correct

? Defective Product

? Higher Maintenance Costs

Question No: 12 (Marks: 1) - Please choose one

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

? True

? False

Question No: 13 (Marks: 1) - Please choose one

Availability and Reliability are concerned with

? Perceived quality

? Quantitatively measured quality

Question No: 14 (Marks: 1) - Please choose one

Software Availability can be calculated by the following equation:

? Availability = $(\text{MTTR}/\text{MTTF}) \times 100$

? Availability = $(\text{MTBF}/\text{MTTR}) \times 100$

? Availability = $(\text{MTTF}/\text{MTBF}) \times 100$

? Availability = $(\text{MTBF}/\text{MTTF}) \times 100$

Question No: 15 (Marks: 1) - Please choose one

Phase Index can be calculated by the help of the following formula, where

E_i - the total number of errors uncovered during the ith 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 ith step

ws, wm, wt - weighting factors for serious, moderate, and minor errors

? $PI_i = ws(S_i/E_i) + wm(M_i/E_i) + wt(T_i/E_i)$

? $PI_i = ws(S_i/E_i) + wm(M_i/M_i) + wt(T_i/T)$

? $PI_i = ws(S_i/E_i) + wm(M_i/M_i) + wt(T_i/E_i)$

? $PI_i = ws(S_i/S) + wm(M_i/M) + wt(T_i/E)$

Question No: 16 (Marks: 1) - Please choose one

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

? True

? False

Question No: 17 (Marks: 1) - Please choose one

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

- ? true
- ? false

Question No: 18 (Marks: 1) - Please choose one

From the following listed software development Model, which one is an object oriented model

- ? Classical life cycle model
- ? Fountain model
- ? Spiral model
- ? Waterfall model

Question No: 19 (Marks: 1) - Please choose one

The prototyping model of software development is

- ? a reasonable approach when requirements are well defined.
- ? a useful approach when a customer cannot define requirements clearly.
- ? the best approach to use for projects with large development teams.
- ? a risky model that rarely produces a meaningful product.

Question No: 20 (Marks: 1) - Please choose one

_____ 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: 21 (Marks: 2)

Discuss the role of program restructuring in software reengineering?

Question No: 22 (Marks: 2)

Differentiate Change Control Authority (CCA) and Change Control Board (CCB)?

Question No: 23 (Marks: 2)

Give the uses of Time Boxing?

Question No: 24 (Marks: 3)

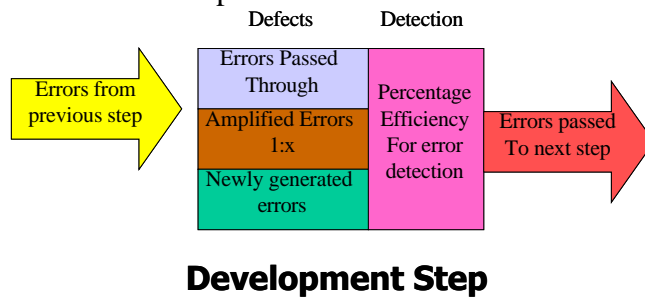
Differentiate between organizational maturity and process area capability?

Question No: 25 (Marks: 3)

What would you understand by the conventional numbering of the product release?

Question No: 26 (Marks: 3)

What would this model depict?



Question No: 27 (Marks: 5)

How we schedule a project with the help Critical Path Method (CPM)? Give only key points.

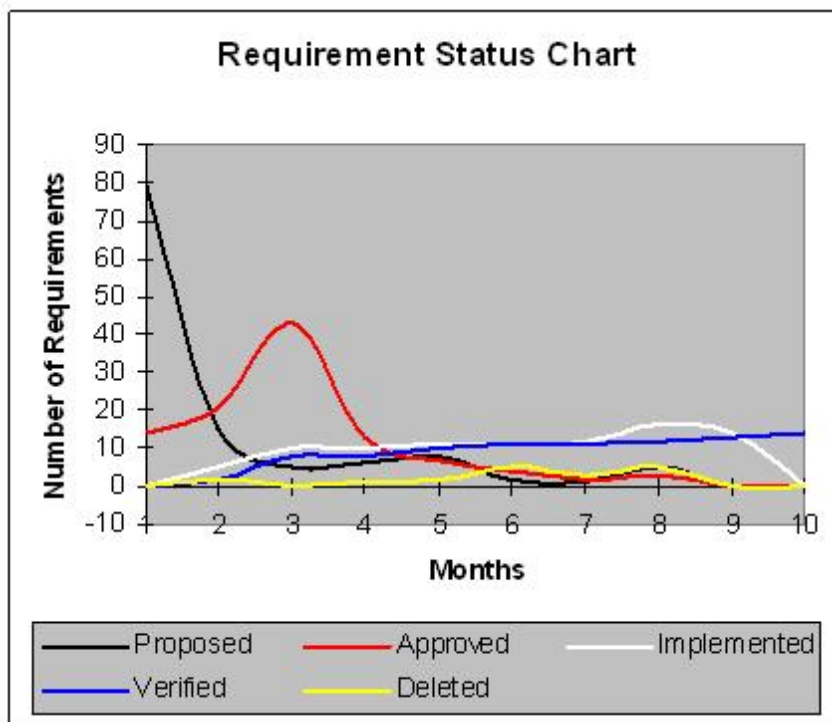
Question No: 28 (Marks: 5)

What problems can be caused by following bad smells in code?

- Large class
- Short gun surgery

Question No: 29 (Marks: 5)

Briefly explain the following graph



Question No: 30 (Marks: 10)

What are the difficulties in maintaining the Legacy System?

Question No: 31 (Marks: 10)

If we have collected the historical data of our organization, how the data related to errors help in assessing the quality of the present project?